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## Model Documentation

### Model Detail

This document provides a complete overview of all element details. For simpler and more focused reports, simply copy this initial template and turn off the sections not required.

### Logical View

Type:	<u>Package</u>
Status:	Proposed. Version . Phase 1.0.
Package:	Model
Detail:	<i>Created on 1/14/2013. Last modified on 1/14/2013</i>
GUID:	{6A1F7B6A-C113-44b4-85DC-AC4BBBA11077}

### Logical Model

Type:	<u>Package</u>
Status:	Proposed. Version 1.0. Phase 1.0.
Package:	Logical View
Detail:	<i>Created on 4/25/2012. Last modified on 9/19/2012</i>
GUID:	{A1D27B1A-2307-4af9-AA9D-5027A0DA7EBC}

### AIM Foundation Radiology Oncology Information Model - (Class diagram)

*Created By:* The AIM Team on 11/9/2011

*Last Modified:* 1/14/2013

*Version:* 4.0 rv.48 Model. *Locked:* False

*GUID:* {80E7EA6C-A1C2-4ecb-82AE-4DF7BA2F4B4C}

Annotation And Image Markup (AIM) Information Model with Radiology and Oncology Classes

The model contains bi-directionality for caGRID deployment of the model, including data service.

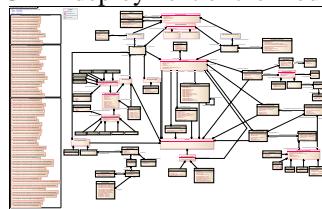


Figure: 1

### edu

Type:	<u>Package</u>
Status:	Proposed. Version 1.0. Phase 1.0.
Package:	Logical Model
Detail:	<i>Created on 5/4/2007. Last modified on 4/25/2012</i>
GUID:	{56FEB07F-27BE-4cf4-B3ED-89FBCFC85D63}

## ***northwestern***

<b>Type:</b>	<b>Package</b>
<b>Status:</b>	Proposed. Version 1.0. Phase 1.0.
<b>Package:</b>	edu
<b>Detail:</b>	<i>Created on 5/4/2007. Last modified on 6/4/2007</i>
<b>GUID:</b>	{D256FD1A-D047-4447-B24B-F19D6DA8DF7C}

## ***radiology***

<b>Type:</b>	<b>Package</b>
<b>Status:</b>	Proposed. Version 1.0. Phase 1.0.
<b>Package:</b>	northwestern
<b>Detail:</b>	<i>Created on 5/4/2007. Last modified on 6/4/2007</i>
<b>GUID:</b>	{3FEB86FF-1743-4887-8B9A-99C969F0A805}

## **AIM**

<b>Type:</b>	<b>Package</b>
<b>Status:</b>	Proposed. Version 1.0. Phase 1.0.
<b>Package:</b>	radiology
<b>Detail:</b>	<i>Created on 11/9/2011. Last modified on 11/10/2011</i>
<b>GUID:</b>	{66F15788-7AE2-4976-8287-60BDD3007C30}

## *AnnotationEntityHasPerformedTaskContextEntityStatement*

<b>Type:</b>	<b>Class</b>	<b>AnnotationStatement</b>
<b>Status:</b>	Proposed.	Version 1.0. Phase 1.0.
<b>Package:</b>	AIM	<b>Keywords:</b>
<b>Detail:</b>	<i>Created on 1/22/2012. Last modified on 1/2/2013.</i>	
<b>GUID:</b>	{79495645-34F2-4a26-9760-A3457756850D}	

The class is used to record an activity or a performed task used to create an AIM instance. The AIM instance may contain zero or more performed tasks. Either ImageAnnotation or AnnotationOfAnnotation class can be a subject of this statement.

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = The class is used to record an activity or a performed task used to create an AIM instance. The AIM instance may contain zero or more performed tasks. Either ImageAnnotation or AnnotationOfAnnotation class can be a subject of this statement..
- CADSR\_Inherited.objectUniqueId.Identifier.OWNER\_REVIEWS = 1.
- CADSR\_Inherited.subjectUniqueId.Identifier.OWNER\_REVIEWS = 1.

- CURATOR REVIEWED = 1.
- definition = The class is used to record an activity or a performed task used to create AIM instance. The instance may be created from one or more performed task..
- ObjectClassConceptCode = C49154.
- ObjectClassConceptDefinition = A verbal and/or written message that asserts, affirms, or declares something..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Statement.
- ObjectClassQualifierConceptCode1 = C51070.
- ObjectClassQualifierConceptCode2 = C63325.
- ObjectClassQualifierConceptCode3 = C101129.
- ObjectClassQualifierConceptCode4 = C38000.
- ObjectClassQualifierConceptCode5 = C101282.
- ObjectClassQualifierConceptCode6 = C51070.
- ObjectClassQualifierConceptCode7 = C44272.
- ObjectClassQualifierConceptDefinition1 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition2 = The universe of discourse that surrounds a language unit and helps to determine its interpretation..
- ObjectClassQualifierConceptDefinition3 = An assigned piece of work, usually with a time allotment..
- ObjectClassQualifierConceptDefinition4 = Executed and carried through to completion..
- ObjectClassQualifierConceptDefinition5 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition6 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition7 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.

- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptDefinitionSource7 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Entity.
- ObjectClassQualifierConceptPreferredName2 = Context.
- ObjectClassQualifierConceptPreferredName3 = Task.
- ObjectClassQualifierConceptPreferredName4 = Performed.
- ObjectClassQualifierConceptPreferredName5 = Have.
- ObjectClassQualifierConceptPreferredName6 = Entity.
- ObjectClassQualifierConceptPreferredName7 = Annotation.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public AnnotationEntityHasPerformedTaskContextEntityStatement	Public AnnotationStatement	

***AnnotationEntityHasPlannedTaskContextEntityStatement***

**Type:**      Class    AnnotationStatement  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      Keywords:  
**Detail:**      Created on 1/22/2012. Last modified on 1/2/2013.  
**GUID:**      {97A96877-7821-47a6-944D-9C6E29D8B35D}

The class is used to record a planned activity or task. The task is used to inform users or computer programs of what activity needs to be performed in order to create AIM instance. The instance may be created from one or more planned task. Since this is an abstract class, users will have to create either ImageAnnotation or AnnotationOfAnnotation to be used with this statement.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = The class is used to record a planned activity or task. The task is used to inform users or computer programs of what activity needs to be performed in order to create AIM instance. The

instance may be created from one or more planned task. Since this is .

- CADSR\_Description2 = an abstract class, users will have to create either ImageAnnotation or AnnotationOfAnnotation to be used with this statement. .
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWS = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWS = 1.
- CURATOR\_REVIEWS = 1.
- definition = The class is used to record a plan activity or task. The task is used to inform users or computer programs of what activity needs to be performed in order to create AIM instance. The instance may be created from one or more planned task..
- ObjectClassConceptCode = C49154.
- ObjectClassConceptDefinition = A verbal and/or written message that asserts, affirms, or declares something..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Statement.
- ObjectClassQualifierConceptCode1 = C51070.
- ObjectClassQualifierConceptCode2 = C63325.
- ObjectClassQualifierConceptCode3 = C101129.
- ObjectClassQualifierConceptCode4 = C25619.
- ObjectClassQualifierConceptCode5 = C101282.
- ObjectClassQualifierConceptCode6 = C51070.
- ObjectClassQualifierConceptCode7 = C44272.
- ObjectClassQualifierConceptDefinition1 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition2 = The universe of discourse that surrounds a language unit and helps to determine its interpretation..
- ObjectClassQualifierConceptDefinition3 = An assigned piece of work, usually with a time allotment..
- ObjectClassQualifierConceptDefinition4 = To devise, contrive, or form in design..
- ObjectClassQualifierConceptDefinition5 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition6 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition7 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..

- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptDefinitionSource7 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Entity.
- ObjectClassQualifierConceptPreferredName2 = Context.
- ObjectClassQualifierConceptPreferredName3 = Task.
- ObjectClassQualifierConceptPreferredName4 = Plan.
- ObjectClassQualifierConceptPreferredName5 = Have.
- ObjectClassQualifierConceptPreferredName6 = Entity.
- ObjectClassQualifierConceptPreferredName7 = Annotation.
- OWNER\_REVIEWS = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public AnnotationEntityHasPlannedTaskContextEntityStatement	Public AnnotationStatement	

***AnnotationOfAnnotationCollection***

**Type:**      **Class**      **[AnnotationCollection](#)**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **[Keywords:](#)**  
**Detail:**      *Created on 12/5/2011. Last modified on 11/21/2012.*  
**GUID:**      {B859B9F2-9F1F-4335-987D-4159E9039426}

This class is the second root classes in the model. It inherits all AnnotationCollection properties. This class signifies that all members of a collection is of type AnnotatonOfAnnotation.

**Custom Properties**

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = This class is the second root classes in the model. It inherits all AnnotationCollection properties. This class signifies that all members of a collection is of type AnnotatonOfAnnotation..
- CADSR\_Inherited.aimVersion.OWNER REVIEWED = 1.
- CADSR\_Inherited.dateTime.OWNER REVIEWED = 1.
- CADSR\_Inherited.description.OWNER REVIEWED = 1.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = This class is the second root classes in the model. It inherits all AnnotationCollection properties. This class signifies that all members of a collection is of type AnnotatonOfAnnotation..
- ObjectClassConceptCode = C101123.
- ObjectClassConceptDefinition = A set of annotations, or comments about an idea, subject or item..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Annotation Collection.
- ObjectClassQualifierConceptCode1 = C44272.
- ObjectClassQualifierConceptDefinition1 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Annotation.
- OWNER REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private annotationOfAnnotationCollection AnnotationOfAnnotationCollection	Private annotationOfAnnotations AnnotationOfAnnotation	
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationCollection	Public AnnotationCollection	

Connector	Source	Target	Notes

**Operations**

Method	Notes	Parameters
<b>GetAnnotationOfAnnotation()</b> AnnotationOfAnnotation[] Public		
<b>SetAnnotationOfAnnotation()</b> void Public		<b>AnnotationOfAnnotation[] [in]</b> annotationOfAnnotation

***AnnotationOfAnnotationHasAnnotationOfAnnotationStatement*****Type:**      Class    **AnnotationOfAnnotationStatement****Status:**      Proposed. Version 1.0. Phase 1.0.**Package:**      AIM      **Keywords:****Detail:**      Created on 12/27/2011. Last modified on 1/2/2013.**GUID:**      {0999D242-BCE5-457b-B1F2-B6A6D6D96077}

An instance of AnnotationOfAnnotation can reference existing annotation of annotations.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An instance of AnnotationOfAnnotation can reference existing annotation of annotations..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C49154.
- ObjectClassConceptDefinition = A verbal and/or written message that asserts, affirms, or declares something..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Statement.
- ObjectClassQualifierConceptCode1 = C44272.
- ObjectClassQualifierConceptCode2 = C44272.

- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C44272.
- ObjectClassQualifierConceptCode5 = C44272.
- ObjectClassQualifierConceptDefinition1 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition2 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition5 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Annotation.
- ObjectClassQualifierConceptPreferredName2 = Annotation.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Annotation.
- ObjectClassQualifierConceptPreferredName5 = Annotation.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<u>Generalization</u> Source -> Destination	Public AnnotationOfAnnotationHasAnnotationOfAnnotationStatement	Public AnnotationOfAnnotationStatement	

### *AnnotationOfAnnotationHasAnnotationRoleEntityStatement*

Type:	<b>Class</b>	<b>AnnotationOfAnnotationStatement</b>
Status:	Proposed.	Version 1.0. Phase 1.0.
Package:	AIM	<b>Keywords:</b>
Detail:	<i>Created on 12/19/2011. Last modified on 1/2/2013.</i>	
GUID:	{0DA1BDF0-DA89-4946-9F7B-221F6BFBC254}	

A given instance of type AnnotationOfAnnotation can have a role assigned. Examples of roles can be baseline, follow-up, referenced case, etc. They are captured in the model as coded terms in AnnotationRoleEntity class. Some of these roles have been defined in DICOM standard part 16, Content Mapping Resource. For example:

Baseline Category:

- DCM 112074 Target Lesion at Baseline
- DCM 112075 Non-Target Lesion at Baseline
- DCM 112076 Non-Lesion at Baseline

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = A given instance of type AnnotationOfAnnotation can have a role assigned. Examples of roles can be baseline, follow-up, referenced case, etc. They are captured in the model as coded terms in AnnotationRoleEntity class. .
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = A given instance of type AnnotationOfAnnotation can have a role assigned. Examples of roles can be baseline, follow-up, referenced case, etc. They are captured in the model as coded terms in AnnotationRoleEntity class. .
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C48835.
- ObjectClassQualifierConceptCode2 = C44272.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C44272.
- ObjectClassQualifierConceptCode5 = C44272.

- ObjectClassQualifierConceptDefinition1 = The usual or expected function of something; the part something plays in an action or event..
- ObjectClassQualifierConceptDefinition2 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition5 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Role.
- ObjectClassQualifierConceptPreferredName2 = Annotation.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Annotation.
- ObjectClassQualifierConceptPreferredName5 = Annotation.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasAnnotationRoleEntityStatement	Public AnnotationOfAnnotationHasAnnotationRoleEntityStatement	

***AnnotationOfAnnotationHasCalculationEntityStatement***

Type:           **Class**     **AnnotationOfAnnotationStatement**  
 Status:       Proposed. Version 1.0. Phase 1.0.  
 Package:      AIM        Keywords:  
 Detail:        Created on 12/15/2011. Last modified on 1/2/2013.

**GUID:** {E7683E4A-EAD1-46f6-9E5D-E99896E1B414}

An instance of AnnotationOfAnnotation can have one or more calculation results. The instance can reference one calculation at a time. For example, if there are three calculation results, there must be three AnnotationOfAnnotationHasCalculationEntityStatements.

#### **Custom Properties**

- isActive = False

#### **Tagged Values**

- CADSR\_Description = An instance of AnnotationOfAnnotation can have one or more calculation results. The instance can reference one calculation at a time. For example, if there are three calculation results, there must be three AnnotationOfAnnotationHasCalculationEntityStatement.
- CADSR\_Description2 = ents. .
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWS = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWS = 1.
- CURATOR\_REVIEWS = 1.
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C54125.
- ObjectClassQualifierConceptCode2 = C101282.
- ObjectClassQualifierConceptCode3 = C44272.
- ObjectClassQualifierConceptCode4 = C44272.
- ObjectClassQualifierConceptDefinition1 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinition2 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition3 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition4 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.

- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Calculation.
- ObjectClassQualifierConceptPreferredName2 = Have.
- ObjectClassQualifierConceptPreferredName3 = Annotation.
- ObjectClassQualifierConceptPreferredName4 = Annotation.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotation HasCalculationEntityStatement	Public AnnotationOfAnnotation nStatement	

***AnnotationOfAnnotationHasGeneralLesionObservationEntityStatement***

**Type:** Class **AnnotationOfAnnotationStatement**  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM **Keywords:**  
**Detail:** *Created on 9/21/2012. Last modified on 1/2/2013.*  
**GUID:** {36A3E1D6-52B4-4cad-8879-9314DDCCD7AD}

An instance of annotation of annotation may have one or more general lesion observations associate with it. AnnotationOfAnnotationHasGeneralLesionObservationEntityStatement represents a direct relationship between an instance of annotation of annotation and general lesion observation. If you have two general lesion observations, you will need to create two statements.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An instance of annotation of annotation may have general lesion observation associate with it..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWED = 1.

- CURATOR\_REVIEWS = 1.
- documentation = An instance of annotation of annotation may have general lesion observation associate with it..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C25598.
- ObjectClassQualifierConceptCode2 = C3824.
- ObjectClassQualifierConceptCode3 = C63764.
- ObjectClassQualifierConceptCode4 = C101282.
- ObjectClassQualifierConceptCode5 = C44272.
- ObjectClassQualifierConceptCode6 = C44272.
- ObjectClassQualifierConceptDefinition1 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition2 = A localized pathological or traumatic structural change, damage, deformity, or discontinuity of tissue, organ, or body part..
- ObjectClassQualifierConceptDefinition3 = Widespread, broadly dispersed, common..
- ObjectClassQualifierConceptDefinition4 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition5 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition6 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Observation.

- ObjectClassQualifierConceptPreferredName2 = Lesion.
- ObjectClassQualifierConceptPreferredName3 = Generalized.
- ObjectClassQualifierConceptPreferredName4 = Have.
- ObjectClassQualifierConceptPreferredName5 = Annotation.
- ObjectClassQualifierConceptPreferredName6 = Annotation.
- OWNER\_REVIEWED = 1.

### ***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasGeneralLesionObservationEntityStatement	Public AnnotationOfAnnotationHasGeneralLesionObservationStatement	

### *AnnotationOfAnnotationHasImageAnnotationStatement*

Type:           **Class**    [\*\*AnnotationOfAnnotationStatement\*\*](#)

Status:       Proposed. Version 1.0. Phase 1.0.

Package:      AIM       [\*\*Keywords:\*\*](#)

Detail:        Created on 12/27/2011. Last modified on 1/2/2013.

GUID:         {59F9757A-6258-411e-90DC-F3ADFF469075}

An instance of AnnotationOfAnnotation can reference existing image annotations. Results from image annotations can be used to further analysis, computation, comparison, reference, etc.

### ***Custom Properties***

- isActive = False

### ***Tagged Values***

- CADSR\_Description = An instance of AnnotationOfAnnotation can reference existing image annotations. Results from image annotations can be used to further analysis, computation, comparison, reference, etc..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CURATOR\_REVIEWED = 1.
- ObjectClassConceptCode = C101135.
- ObjectClassConceptDefinition = A statement used to describe something found and to be addressed on an image or series of images. It describes a thing found, measured and graphically annotated on an image or

images from the same series. It consists of a subject, predicate and object..

- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Image Annotation Statement.
- ObjectClassQualifierConceptCode1 = C101282.
- ObjectClassQualifierConceptCode2 = C44272.
- ObjectClassQualifierConceptCode3 = C44272.
- ObjectClassQualifierConceptDefinition1 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition2 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition3 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Have.
- ObjectClassQualifierConceptPreferredName2 = Annotation.
- ObjectClassQualifierConceptPreferredName3 = Annotation.
- OWNER\_REVIEWED = 1.

### Connections

Connector	Source	Target	Notes
<u>Generalization</u> Source -> Destination	Public AnnotationOfAnnotationHasImageAnnotationStatement	Public AnnotationOfAnnotationStatement	

### *AnnotationOfAnnotationHasImagingObservationEntityStatement*

Type:	<u>Class</u>	<u>AnnotationOfAnnotationStatement</u>
Status:	Proposed.	Version 1.0. Phase 1.0.
Package:	AIM	<u>Keywords:</u>
Detail:	<i>Created on 12/15/2011. Last modified on 1/2/2013.</i>	
GUID:	{31C04C2A-4BA6-41f8-BE04-E6237B3D4CF1}	

An instance of AnnotationOfAnnotation can have one or more imaging observations associated with the instance. AnnotationOfAnnotationHasImagingObservationEntityStatement expresses a relationship between single instance of AnnotationOfAnnotation and an imaging observation.

#### ***Custom Properties***

- isActive = False

#### ***Tagged Values***

- CADSR\_Description = An instance of AnnotationOfAnnotation can have one or more imaging observations associated with the instance.  
AnnotationOfAnnotationHasImagingObservationEntityStatement expresses a relationship between single instance of AnnotationOfAnnotation and an imaging observation.
- CADSR\_Description2 = imaging observation..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C25598.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C44272.
- ObjectClassQualifierConceptCode5 = C44272.
- ObjectClassQualifierConceptDefinition1 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition5 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..

- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Observation.
- ObjectClassQualifierConceptPreferredName2 = Image.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Annotation.
- ObjectClassQualifierConceptPreferredName5 = Annotation.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasImagingObservationEntityStatement	Public AnnotationOfAnnotationStatement	

***AnnotationOfAnnotationHasImagingPhysicalEntityStatement***

**Type:**      **Class**    **AnnotationOfAnnotationStatement**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM    **Keywords:**  
**Detail:**      *Created on 12/15/2011. Last modified on 1/2/2013.*  
**GUID:**      {DEDF7955-FF71-47aa-A051-0FE432F04A84}

An instance of AnnotationOfAnnotation can reference an imaging physical entity, a thing that can be identified on an image.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An instance of AnnotationOfAnnotation can reference an imaging physical entity, a thing that can be identified on an image. .

- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C25618.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C44272.
- ObjectClassQualifierConceptCode5 = C44272.
- ObjectClassQualifierConceptDefinition1 = Having substance or material existence; concerned with material things; of or pertaining to the body as distinguished from the mind or spirit..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition5 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Physical.
- ObjectClassQualifierConceptPreferredName2 = Image.
- ObjectClassQualifierConceptPreferredName3 = Have.

- ObjectClassQualifierConceptPreferredName4 = Annotation.
- ObjectClassQualifierConceptPreferredName5 = Annotation.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasImagingPhysicalEntityStatement	Public AnnotationOfAnnotationInferenceStatement	

***AnnotationOfAnnotationHasInferenceEntityStatement***

Type:           **Class**    **[AnnotationOfAnnotationStatement](#)**

Status:          Proposed. Version 1.0. Phase 1.0.

Package:       AIM      **Keywords:**

Detail:          Created on 12/15/2011. Last modified on 1/2/2013.

GUID:           {12F95EB1-999D-400a-8A5F-0818127FA6B0}

An instance of AnnotationOfAnnotation can have a conclusion derived by interpreting image(s) and/or other supplemental information related to the image(s). The conclusion is stored in InferenceEntity.

***Custom Properties***

- isActive = False

***Tagged Values***

- CADSR\_Description = An instance of AnnotationOfAnnotation can have a conclusion derived by interpreting image(s) and/or other supplemental information related to the image(s). The conclusion is stored in InferenceEntity..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CURATOR\_REVIEWED = 1.
- documentation = An instance of AnnotationOfAnnotation can have a conclusion derived by interpreting image(s) and/or other supplemental information related to the image(s). The conclusion is stored in InferenceEntity..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..

- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C75591.
- ObjectClassQualifierConceptCode2 = C101282.
- ObjectClassQualifierConceptCode3 = C44272.
- ObjectClassQualifierConceptCode4 = C44272.
- ObjectClassQualifierConceptDefinition1 = The process by which conclusions are derived from stated facts by the application of logical rules..
- ObjectClassQualifierConceptDefinition2 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition3 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition4 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Inference.
- ObjectClassQualifierConceptPreferredName2 = Have.
- ObjectClassQualifierConceptPreferredName3 = Annotation.
- ObjectClassQualifierConceptPreferredName4 = Annotation.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasInferenceEntityStatement	Public AnnotationOfAnnotationStatement	

***AnnotationOfAnnotationHasTimePointLesionObservationEntityStatement***

Type:	Class	<a href="#">AnnotationOfAnnotationStatement</a>
Status:	Proposed.	Version 1.0. Phase 1.0.
Package:	AIM	<a href="#">Keywords:</a>
Detail:		<i>Created on 9/21/2012. Last modified on 1/2/2013.</i>
GUID:		{02EA32AB-29ED-4fb9-8632-34FB9E9FE374}

An instance of annotation of annotation may have one or more timepoint lesion observations associate with it. AnnotationOfAnnotationHasTimePointLesionObservationEntityStatement represents a direct relationship between an instance of annotation of annotation and timepoint lesion observation. If you have two general timepoint observations, you will need to create two statements.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An instance of annotation of annotation may have time point lesion observation associate with it..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWS = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWS = 1.
- CURATOR\_REVIEWS = 1.
- documentation = An instance of annotation of annotation may have time point lesion observation associate with it..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C25598.
- ObjectClassQualifierConceptCode2 = C3824.
- ObjectClassQualifierConceptCode3 = C68568.
- ObjectClassQualifierConceptCode4 = C101282.
- ObjectClassQualifierConceptCode5 = C44272.
- ObjectClassQualifierConceptCode6 = C44272.
- ObjectClassQualifierConceptDefinition1 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition2 = A localized pathological or traumatic structural change, damage, deformity, or discontinuity of tissue, organ, or body part..

- ObjectClassQualifierConceptDefinition3 = A specific point in the time continuum, including those established relative to an event..
- ObjectClassQualifierConceptDefinition4 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition5 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition6 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Observation.
- ObjectClassQualifierConceptPreferredName2 = Lesion.
- ObjectClassQualifierConceptPreferredName3 = Timepoint.
- ObjectClassQualifierConceptPreferredName4 = Have.
- ObjectClassQualifierConceptPreferredName5 = Annotation.
- ObjectClassQualifierConceptPreferredName6 = Annotation.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasTimePointLesionObservationEntityStatement	Public AnnotationOfAnnotationStatement	

*AnnotationOfAnnotationIsComparedWithAnnotationOfAnnotationStatement*

Type:      Class    AnnotationOfAnnotationStatement

*Status:* Proposed. Version 1.0. Phase 1.0.  
*Package:* AIM      *Keywords:*  
*Detail:* Created on 12/16/2011. Last modified on 1/2/2013.  
*GUID:* {A17AE1E4-4AF0-45c7-ABAE-3C71E8A4B31B}

An instance of AnnotationOfAnnotation can be used for comparison with another instance of AnnotationOfAnnotation. AIM users can further create CalculationEntityIsComparedWithCalculationEntityStatement to compare a calculation result from the subject AnnotationOfAnnotation instance with a calculation result from the object AnnotationOfAnnotation.

#### **Custom Properties**

- isActive = False

#### **Tagged Values**

- CADSR\_Description = An instance of AnnotationOfAnnotation can be used for comparison with another instance of AnnotationOfAnnotation. .
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An instance of AnnotationOfAnnotation can be used for comparison with another instance of AnnotationOfAnnotation. .
- ObjectClassConceptCode = C49154.
- ObjectClassConceptDefinition = A verbal and/or written message that asserts, affirms, or declares something..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Statement.
- ObjectClassQualifierConceptCode1 = C44272.
- ObjectClassQualifierConceptCode2 = C44272.
- ObjectClassQualifierConceptCode3 = C62355.
- ObjectClassQualifierConceptCode4 = C49156.
- ObjectClassQualifierConceptCode5 = C44272.
- ObjectClassQualifierConceptCode6 = C44272.
- ObjectClassQualifierConceptDefinition1 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition2 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..

- ObjectClassQualifierConceptDefinition3 = Used to indicate the presence of something or someone..
- ObjectClassQualifierConceptDefinition4 = The examination of two or more people or things in order to detect similarities and differences..
- ObjectClassQualifierConceptDefinition5 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition6 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Annotation.
- ObjectClassQualifierConceptPreferredName2 = Annotation.
- ObjectClassQualifierConceptPreferredName3 = With.
- ObjectClassQualifierConceptPreferredName4 = Comparison.
- ObjectClassQualifierConceptPreferredName5 = Annotation.
- ObjectClassQualifierConceptPreferredName6 = Annotation.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotation IsComparedWithAnnotation OfAnnotationStatement	Public AnnotationOfAnnotation Statement	

***AnnotationOfAnnotationIsComparedWithImageAnnotationStatement***Type:      **Class**      [AnnotationOfAnnotationStatement](#)

Status:      Proposed. Version 1.0. Phase 1.0.

Package:      AIM      *Keywords:*

*Detail:* Created on 12/16/2011. Last modified on 1/2/2013.

*GUID:* {3A1C9B3B-7D2A-4db4-917D-6514A92E32A4}

An instance of AnnotationOfAnnotation can be used for comparison with an instance of ImageAnnotation. AIM users can further create CalculationEntityIsComparedWithCalculationEntityStatement to compare a calculation result from the subject AnnotationOfAnnotation instance with a calculation result from the object imageAnnotation.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = An instance of AnnotationOfAnnotation can be used for comparison with an instance of ImageAnnotation..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An instance of AnnotationOfAnnotation can be used for comparison with an instance of ImageAnnotation..
- ObjectClassConceptCode = C101135.
- ObjectClassConceptDefinition = A statement used to describe something found and to be addressed on an image or series of images. It describes a thing found, measured and graphically annotated on an image or images from the same series. It consists of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Image Annotation Statement.
- ObjectClassQualifierConceptCode1 = C62355.
- ObjectClassQualifierConceptCode2 = C49156.
- ObjectClassQualifierConceptCode3 = C44272.
- ObjectClassQualifierConceptCode4 = C44272.
- ObjectClassQualifierConceptDefinition1 = Used to indicate the presence of something or someone..
- ObjectClassQualifierConceptDefinition2 = The examination of two or more people or things in order to detect similarities and differences..
- ObjectClassQualifierConceptDefinition3 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition4 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.

- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptPreferredName1 = With.
- ObjectClassQualifierConceptPreferredName2 = Comparison.
- ObjectClassQualifierConceptPreferredName3 = Annotation.
- ObjectClassQualifierConceptPreferredName4 = Annotation.
- OWNER\_REVIEWED = 1.

### Connections

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationIsComparedWithImageAnnotationStatement	Public AnnotationOfAnnotationStatement	

### *AnnotationOfAnnotationStatement*

**Type:** Class **AnnotationStatement**  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM      **Keywords:**  
**Detail:** Created on 12/15/2011. Last modified on 11/21/2012.  
**GUID:** {FB171CD9-13D2-49b0-8F15-A1ABC8B9416F}

It represents a general concept about a statement used to describe something found and to be addressed on an image or the same thing on images in a series. A statement consists of a subject, predicate and object.

This class has AIM statements that can only be applied to AnnotationOfAnnotation.

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = This class has AIM statements that can only be applied to AnnotationOfAnnotation..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.

- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = This class has AIM statements that can only be applied to AnnotationOfAnnotation..
- ObjectClassConceptCode = C49154.
- ObjectClassConceptDefinition = A verbal and/or written message that asserts, affirms, or declares something..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Statement.
- ObjectClassQualifierConceptCode1 = C44272.
- ObjectClassQualifierConceptCode2 = C44272.
- ObjectClassQualifierConceptDefinition1 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition2 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Annotation.
- ObjectClassQualifierConceptPreferredName2 = Annotation.
- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasCalculationEntityStatement	Public AnnotationOfAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasImagingPhysicalEntityStatement	Public AnnotationOfAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasAnnotationRoleEntityStatement	Public AnnotationOfAnnotationStatement	
<b>Generalization</b>	Public	Public	

<b>Connector</b>	<b>Source</b>	<b>Target</b>	<b>Notes</b>
Source -> Destination	ImageAnnotationIsComparedWithImageAnnotationStatement	AnnotationOfAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationIsComparedWithAnnotationOfAnnotationStatement	Public AnnotationOfAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationStatement	Public AnnotationStatement	
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasImageAnnotationStatement	Public AnnotationOfAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public CalculationEntityIsComparedWithCalculationEntityStatement	Public AnnotationOfAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationIsComparedWithImageAnnotationStatement	Public AnnotationOfAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasGeneralLesionObservationEntityStatement	Public AnnotationOfAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasImagingObservationEntityStatement	Public AnnotationOfAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasInferenceEntityStatement	Public AnnotationOfAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationIsComparedWithAnnotationOfAnnotationStatement	Public AnnotationOfAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasAnnotationRoleEntityStatement	Public AnnotationOfAnnotationStatement	

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasAnnotationOfAnnotationStatement	Public AnnotationOfAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationHasTimePointLesionObservationEntityStatement	Public AnnotationOfAnnotationStatement	

### *AnnotationStatement*

**Type:** Class  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM      **Keywords:**  
**Detail:** *Created on 11/14/2011. Last modified on 11/21/2012.*  
**GUID:** {8532DA5A-D271-468f-AEDB-35F18757744E}

This abstract class is the parent of ImageAnnotationStatement and AnnotationOfAnnotationStatement class. It represents a general concept about a statement used to describe something found and to be addressed on an image or the same thing on images in a series. A statement concept expresses a most granular amount of information an AIM annotation can have. AIM annotation presents its content in a collection of semantic statements. Statements describe a thing found, measured and graphically annotated on an image or images from the same series. A statement consists of a subject, predicate and object. There are three types of statements, AnnotationStatement, AnnotationOfAnnotationStatement and ImageAnnotation.

The AnnotationStatement class have nine different subtypes of annotation statements that can be applied to both AnnotationOfAnnotationStatement and ImageAnnotationStatement. The classes derived from AnnotationStatement can be seen in the AIM 4.0 UML diagram section called "AnnotationStatement (common to both types of annotations)".

A statement class represents a predicate. Each statement class has subject and object association. A subject and object association can have a link to ImagingPhysicalEntity, ImagingObservationEntity, InferenceEntity, ReferencedAnnotationEntity, GeometricShapeEntity, TextAnnotationEntity, UriImageReferenceEntity, DICOMImageReferenceEntity, ImageAnnotation and AnnotationOfAnnotation. Not all combinations between these classes are valid. See valid statement tables for valid statements.

Naming convention for a statement shall begin with the name of subject class, predicate or relation (e.g. has, compares, references, excludes, is comprise of and uses) and name of object class.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = It represents a general concept about a statement used to describe something found and to be addressed on an image or the same thing on images in a series. A statement consists of a subject, predicate and object. .

- CURATOR\_REVIEWS = 1.
- documentation = It represents a general concept about a statement used to describe something found and to be addressed on an image or the same thing on images in a series. A statement consists of a subject, predicate and object. .
- ObjectClassConceptCode = C49154.
- ObjectClassConceptDefinition = A verbal and/or written message that asserts, affirms, or declares something..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Statement.
- ObjectClassQualifierConceptCode1 = C44272.
- ObjectClassQualifierConceptDefinition1 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Annotation.
- OWNER\_REVIEWS = 1.

***Connections***

Connector	Source	Target	Notes
<b><u>Association</u></b> Bi-Directional	Private annotationOfAnnotation AnnotationOfAnnotation	Private annotationOfAnnotationStatementCollection AnnotationStatement	
<b><u>Generalization</u></b> Source -> Destination	Public ImagingObservationEntityIsFoundInImagingPhysicalEntityStatement	Public AnnotationStatement	
<b><u>Generalization</u></b> Source -> Destination	Public CalculationEntityUsesCalculationEntityStatement	Public AnnotationStatement	
<b><u>Generalization</u></b> Source -> Destination	Public ImagingPhysicalEntityHasCalculationEntityStatement	Public AnnotationStatement	
<b><u>Generalization</u></b> Source -> Destination	Public AnnotationEntityHasPlannedTaskContextEntityStatement	Public AnnotationStatement	

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImagingObservationEntityHasCalculationEntityStatement	Public AnnotationStatement	
<b>Association</b> Bi-Directional	Private imageAnnotation ImageAnnotation	Private imageAnnotationStatementCollection AnnotationStatement	
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationStatement	Public AnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImagingPhysicalEntity HasImagingObservationEntityStatement	Public AnnotationStatement	
<b>Generalization</b> Source -> Destination	Public CalculationEntityReferencesCalculationEntityStatement	Public AnnotationStatement	
<b>Generalization</b> Source -> Destination	Public AnnotationEntityHasPerformedTaskContextEntityStatement	Public AnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationStatement	Public AnnotationStatement	

**Attributes**

Attribute	Notes	Constraints and tags
<b>subjectUniqueIdentifier</b> II Private	An identifier string that can either be a string representation of an OID, such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a subject of selected AIM predicate.	<i>Default:</i>  <u>CADSR_Description</u> = An identifier string that can either be a string representation of an OID, such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a subject of selected AIM predicate. <u>CURATOR REVIEWED</u> = 1 ] <u>OWNER REVIEWED</u> = 1 ] <u>PropertyConceptCode</u> = C70663 ] <u>PropertyConceptDefinition</u> = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a

Attribute	Notes	Constraints and tags
		means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o ] [ <u>PropertyConceptDefinition_2</u> = r body of data. ] [ <u>PropertyConceptDefinitionSource</u> = NCI ] [ <u>PropertyConceptPreferredName</u> = Unique Identifier ] [ <u>PropertyQualifierConceptCode1</u> = C48910 ] [ <u>PropertyQualifierConceptDefinition1</u> = Some matter, situation, or event that is thought about, written about, or discussed. ] [ <u>PropertyQualifierConceptDefinitionSource1</u> = NCI ] [ <u>PropertyQualifierConceptPreferredName1</u> = Subject ]
<b>objectUniqueIdentifier II</b> Private	An identifier string that can either be a string representation of an OID, such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a object of selected AIM predicate.	<i>Default:</i>  [ <u>CADSR_Description</u> = An identifier string that can either be a string representation of an OID, such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a object of selected AIM predicate. ] [ <u>CURATOR REVIEWED</u> = 1 ] [ <u>OWNER REVIEWED</u> = 1 ] [ <u>PropertyConceptCode</u> = C70663 ] [ <u>PropertyConceptDefinition</u> = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o ] [ <u>PropertyConceptDefinition_2</u> = r body of data. ] [ <u>PropertyConceptDefinitionSource</u> = NCI ] [ <u>PropertyConceptPreferredName</u> = Unique Identifier ] [ <u>PropertyQualifierConceptCode1</u> = C45281 ] [ <u>PropertyQualifierConceptDefinition1</u> = Something perceptible by one or more of the senses, especially by vision or touch; a material thing. ] [ <u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]

Attribute	Notes	Constraints and tags
		<u>nSource1</u> = NCI ] [ <u>PropertyQualifierConceptPreferredName1</u> = Object ]

**Operations**

Method	Notes	Parameters
<b>GetObjectUniqueIdentifier() II</b> Public	An identifier string that can either be a string representation of an OID, such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a object of selected AIM predicate.	
<b>SetObjectUniqueIdentifier() void</b> Public	An identifier string that can either be a string representation of an OID, such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a object of selected AIM predicate.	<b>II</b> [in] newVal
<b>GetSubjectUniqueIdentifier() II</b> Public	An identifier string that can either be a string representation of an OID, such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a subject of selected AIM predicate.	
<b>SetSubjectUniqueIdentifier() void</b> Public	An identifier string that can either be a string representation of an OID, such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a subject of selected AIM predicate.	<b>II</b> [in] newVal

***CalculationEntityIsComparedWithCalculationEntityStatement*****Type:** Class AnnotationOfAnnotationStatement**Status:** Proposed. Version 1.0. Phase 1.0.**Package:** AIM**Keywords:****Detail:** *Created on 12/15/2011. Last modified on 1/2/2013.***GUID:** {5948FF86-1772-4d5f-A756-F8967E8CC6D9}

When an AIM user wants to compare two calculation results, the user can use CalculationEntityIsComparedWithCalculationEntityStatement to identify a subject and object calculation result. A result from this comparison may be captured as a new calculation result or as an instance of InferenceEntity.

This statement should not exist alone. There should be a statement such as AnnotationOfAnnotationIsComparedWithAnnotationOfAnnotationStatement or AnnotationOfAnnotationIsComparedWithImageAnnotationStatement exist along side the CalculationEntityIsComparedWithCalculationEntityStatement.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = When an AIM user wants to compare two calculation results, the user can use CalculationEntityIsComparedWithCalculationEntityStatement to identify a subject and object calculation result. .
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = When an AIM user wants to compare two calculation results, the user can use CalculationEntityIsComparedWithCalculationEntityStatement to identify a subject and object calculation result. .
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C54125.
- ObjectClassQualifierConceptCode2 = C62355.
- ObjectClassQualifierConceptCode3 = C49156.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C54125.
- ObjectClassQualifierConceptDefinition1 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinition2 = Used to indicate the presence of something or someone..
- ObjectClassQualifierConceptDefinition3 = The examination of two or more people or things in order to detect similarities and differences..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.

- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Calculation.
- ObjectClassQualifierConceptPreferredName2 = With.
- ObjectClassQualifierConceptPreferredName3 = Comparison.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Calculation.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public CalculationEntityIsComparedWithCalculationEntityStatement	Public AnnotationOfAnnotationStatement	

***CalculationEntityReferencesCalculationEntityStatement***

**Type:**      **Class**    **AnnotationStatement**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      Created on 12/16/2011. Last modified on 1/2/2013.  
**GUID:**      {7D96DB1D-C11A-4041-AAF4-2AEB32196EC4}

A calculation result can reference another calculation result without using the referenced calculation result. Both results are related

A use case:  
A cardiac magnetic resonance imaging

Working with AIM:

***Custom Properties***

- isActive = False

***Tagged Values***

- CADSR\_Description = A calculation result can reference another calculation result without using the referenced calculation result. Both results are related

A use case:

A cardiac magnetic resonance imaging

Working with AIM:.

- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C54125.
- ObjectClassQualifierConceptCode2 = C48294.
- ObjectClassQualifierConceptCode3 = C51070.
- ObjectClassQualifierConceptCode4 = C54125.
- ObjectClassQualifierConceptDefinition1 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinition2 = Something referred to; the object of a reference..
- ObjectClassQualifierConceptDefinition3 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition4 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Calculation.
- ObjectClassQualifierConceptPreferredName2 = Reference Object.
- ObjectClassQualifierConceptPreferredName3 = Entity.

- ObjectClassQualifierConceptPreferredName4 = Calculation.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public CalculationEntityReferencesCalculationEntityStatement	Public AnnotationStatement	

***CalculationEntityUsesCalculationEntityStatement*****Type:** Class AnnotationStatement**Status:** Proposed. Version 1.0. Phase 1.0.**Package:** AIM Keywords:**Detail:** Created on 12/18/2011. Last modified on 1/2/2013.**GUID:** {CFF7A60F-DB92-47c8-9D7D-DB8024D25213}

A calculation result can use another calculation result for its own computation purposes.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = A calculation result can use another calculation result for its own computation purposes..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CURATOR\_REVIEWED = 1.
- documentation = A calculation result can use another calculation result for its own computation purposes..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C54125.

- ObjectClassQualifierConceptCode2 = C95018.
- ObjectClassQualifierConceptCode3 = C51070.
- ObjectClassQualifierConceptCode4 = C54125.
- ObjectClassQualifierConceptDefinition1 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinition2 = To put into action or service..
- ObjectClassQualifierConceptDefinition3 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition4 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Calculation.
- ObjectClassQualifierConceptPreferredName2 = Use.
- ObjectClassQualifierConceptPreferredName3 = Entity.
- ObjectClassQualifierConceptPreferredName4 = Calculation.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public CalculationEntityUsesC alculationEntityStateme nt	Public AnnotationStatement	

***DicomImageReferenceEntity***

**Type:**      **Class**      **ImageReferenceEntity**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      *Created on 12/9/2011. Last modified on 11/21/2012.*  
**GUID:**      {A44D0D5D-A2C3-4199-A2FC-6650C0CF3013}

DICOMImageReferenceEntity is the source image for the annotation. It represents images stored in DICOM format.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = DICOMImageReferenceEntity is a source image for the annotation..
- CADSR\_Inherited.uniqueIdentifier.OWNER\_REVIEWS = 1.
- CURATOR\_REVIEWS = 1.
- documentation = DICOMImageReferenceEntity is a source image for the annotation..
- ObjectClassConceptCode = C51070.
- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.
- ObjectClassQualifierConceptCode1 = C48294.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptCode3 = C49059.
- ObjectClassQualifierConceptDefinition1 = Something referred to; the object of a reference..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition3 = A comprehensive set of standards for communications between medical imaging devices, including handling, storing and transmitting information in medical imaging. It includes a file format definition and a network communication protocol..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Reference Object.
- ObjectClassQualifierConceptPreferredName2 = Image.
- ObjectClassQualifierConceptPreferredName3 = DICOM.
- OWNER\_REVIEWS = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public DicomImageReferenceEntity	Public ImageReferenceEntity	
<b>Association</b> Bi-Directional	Private dicomImageReferenceEntity DicomImageReferenceEntity	Private imageStudy ImageStudy	

**Operations**

Method	Notes	Parameters
<b>GetImageStudy()</b> ImageStudy Public		
<b>SetImageStudy()</b> void Public		<b>ImageStudy</b> [in] imageStudy

***DicomImageReferenceEntityHasCalculationEntityStatement***

**Type:**            **Class**      **ImageAnnotationStatement**  
**Status:**        Proposed. Version 1.0. Phase 1.0.  
**Package:**       AIM        **Keywords:**  
**Detail:**          *Created on 12/16/2011. Last modified on 1/2/2013.*  
**GUID:**          {3ADC0D94-017C-412e-B281-09492CBE21EE}

A DICOM image can have a calculation associated with the image.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = A DICOM image can have a calculation associated with the image..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = A DICOM image can have a calculation associated with the image..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..

- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C54125.
- ObjectClassQualifierConceptCode2 = C101282.
- ObjectClassQualifierConceptCode3 = C51070.
- ObjectClassQualifierConceptCode4 = C48294.
- ObjectClassQualifierConceptCode5 = C48179.
- ObjectClassQualifierConceptCode6 = C49059.
- ObjectClassQualifierConceptDefinition1 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinition2 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition3 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition4 = Something referred to; the object of a reference..
- ObjectClassQualifierConceptDefinition5 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition6 = A comprehensive set of standards for communications between medical imaging devices, including handling, storing and transmitting information in medical imaging. It includes a file format definition and a network communication protocol..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Calculation.
- ObjectClassQualifierConceptPreferredName2 = Have.
- ObjectClassQualifierConceptPreferredName3 = Entity.
- ObjectClassQualifierConceptPreferredName4 = Reference Object.
- ObjectClassQualifierConceptPreferredName5 = Image.
- ObjectClassQualifierConceptPreferredName6 = DICOM.

- OWNER REVIEWED = 1.

### Connections

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public DicomImageReference EntityHasCalculationEn tityStatement	Public ImageAnnotationState ment	

### *DicomImageReferenceEntityHasImagingObservationEntityStatement*

Type:           **Class**    **ImageAnnotationStatement**

Status:         Proposed. Version 1.0. Phase 1.0.

Package:       AIM      **Keywords:**

Detail:          Created on 12/20/2011. Last modified on 1/2/2013.

GUID:           {248ACEF5-6453-4038-9502-733667346B12}

A DICOM, captured in DICOMImageReferencEntity, can associate with an image observation, captured in ImagingObservationEntity, to describe an observation on the image.

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = A DICOM, captured in DICOMImageReferencEntity, can associate with an image observation, captured in ImagingObservationEntity, to describe an observation on the image..
- CADSR\_Inherited.objectUniqueId.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueId.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = A DICOM, captured in DICOMImageReferencEntity, can associate with an image observation, captured in ImagingObservationEntity, to describe an observation on the image..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C25598.

- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C25641.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptCode7 = C49059.
- ObjectClassQualifierConceptDefinition1 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = A note acknowledging a source of information or quoting a passage..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition7 = A comprehensive set of standards for communications between medical imaging devices, including handling, storing and transmitting information in medical imaging. It includes a file format definition and a network communication protocol..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptDefinitionSource7 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Observation.
- ObjectClassQualifierConceptPreferredName2 = Image.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Reference.
- ObjectClassQualifierConceptPreferredName6 = Image.

- ObjectClassQualifierConceptPreferredName7 = DICOM.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public DicomImageReference EntityHasImagingObservationEntityStatement	Public ImageAnnotationStatement	

***DicomImageReferenceEntityHasImagingPhysicalEntityStatement***

Type:            Class     **ImageAnnotationStatement**

Status:        Proposed. Version 1.0. Phase 1.0.

Package:      AIM       **Keywords:**

Detail:        Created on 12/20/2011. Last modified on 1/2/2013.

GUID:        {9563AD81-DF65-4ea5-8E6C-1684EBEA9C74}

A DICOM image, captured in DICOMImageReferenceEntity, can associate with an image physical entity, captured in ImagingPhysicalEntity, to describe an observation on the image.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = A DICOM image, captured in DICOMImageReferenceEntity, can associate with an image physicalEntity, captured in ImagingObservationEntity, to describe an observation on the image..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CURATOR\_REVIEWED = 1.
- documentation = A DICOM image, captured in DICOMImageReferenceEntity, can associate with an image physicalEntity, captured in ImagingObservationEntity, to describe an observation on the image..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.

- ObjectClassQualifierConceptCode1 = C25618.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C48294.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptCode7 = C49059.
- ObjectClassQualifierConceptDefinition1 = Having substance or material existence; concerned with material things; of or pertaining to the body as distinguished from the mind or spirit..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = Something referred to; the object of a reference..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition7 = A comprehensive set of standards for communications between medical imaging devices, including handling, storing and transmitting information in medical imaging. It includes a file format definition and a network communication protocol..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptDefinitionSource7 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Physical.
- ObjectClassQualifierConceptPreferredName2 = Image.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Reference Object.

- ObjectClassQualifierConceptPreferredName6 = Image.
- ObjectClassQualifierConceptPreferredName7 = DICOM.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public DicomImageReference EntityHasImagingPhysicalEntityStatement	Public ImageAnnotationStatement	

***DicomSegmentationEntity***

Type:           **Class**    **SegmentationEntity**

Status:          Proposed. Version 1.0. Phase 1.0.

Package:       AIM      **Keywords:**

Detail:          Created on 12/21/2011. Last modified on 11/21/2012.

GUID:           {1CB8C70D-2F84-40bc-89DE-5088D0435776}

A multi-frame image representing a classification of pixels in one or more referenced images. Segmentations are either binary or fractional. See DICOM part 3 Segmentation IOD for further information.

***Custom Properties***

- isActive = False

***Tagged Values***

- CADSR\_Description = A multi-frame image representing a classification of pixels in one or more referenced images. Segmentations are either binary or fractional. See DICOM part 3 Segmentation IOD for further information..
- CADSR\_Inherited.uniqueIdentifier.OWNER\_REVIEWED = 1.
- CURATOR\_REVIEWED = 1.
- documentation = A multi-frame image representing a classification of pixels in one or more referenced images. Segmentations are either binary or fractional. See DICOM part 3 Segmentation IOD for further information..
- ObjectClassConceptCode = C51070.
- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.

- ObjectClassQualifierConceptCode1 = C80146.
- ObjectClassQualifierConceptCode2 = C49059.
- ObjectClassQualifierConceptDefinition1 = The process of assigning a label to every pixel in an image such that pixels with the same label share certain visual characteristics, allowing the image to be partitioned into multiple segments (e.g., boundaries, lines, curves)..
- ObjectClassQualifierConceptDefinition2 = A comprehensive set of standards for communications between medical imaging devices, including handling, storing and transmitting information in medical imaging. It includes a file format definition and a network communication protocol..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Image Segmentation.
- ObjectClassQualifierConceptPreferredName2 = DICOM.
- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public DicomSegmentationEntity	Public SegmentationEntity	

***Attributes***

Attribute	Notes	Constraints and tags
<b>sopInstanceUid II</b> Private	The Service Object Pair Instance Unique Identifier of the Segmentation.	<p><i>Default:</i></p> <p>[CADSR Description] = The Service Object Pair Instance Unique Identifier of the Segmentation. ] [CURATOR REVIEWED = 1 ] [description = The Service Object Pair Instance Unique Identifier of the Segmentation. ] [OWNER REVIEWED = 1 ] [PropertyConceptCode = C70663 ] [PropertyConceptDefinition] = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyConceptDefinition_2 = r body of data.]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Unique Identifier ]</p> <p>[PropertyQualifierConceptCode1 = C48364 ]</p> <p>[PropertyQualifierConceptCode2 = C63426 ]</p> <p>[PropertyQualifierConceptDefinition1 = An occurrence of something.]</p> <p>[PropertyQualifierConceptDefinition2 = The information object and the service class are the two fundamental components of DICOM. Information objects define the core contents of medical imaging, and service classes define what to do with those contents. The service classes and information object ]</p> <p>[PropertyQualifierConceptDefinition2_2 = ts are combined to form the functional units of DICOM. This combination is called a service-object pair.]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Instance ]</p> <p>[PropertyQualifierConceptPreferredName2 = Service-Object Pair ]</p>
<b>sopClassUid II</b> Private	Uniquely identifies the Service Object Pair (SOP) Class. A class represents a type of DICOM object, e.g. Segmentation Storage Class = 1.2.840.10008.5.1.4.1.1.66.4.	<p><i>Default:</i></p> <p>[CADSR_Description = Uniquely identifies the Service Object Pair (SOP) Class. A class represents a type of DICOM object, e.g. Segmentation Storage Class = 1.2.840.10008.5.1.4.1.1.66.4.]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Uniquely identifies the Service Object Pair (SOP) Class. A class represents a type of DICOM object, e.g. Segmentation Storage Class = 1.2.840.10008.5.1.4.1.1.66.4.]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C70663 ]</p> <p>[PropertyConceptDefinition = A set</p>

Attribute	Notes	Constraints and tags
		<p>of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o ]</p> <p>[PropertyConceptDefinition_2 = r body of data. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Unique Identifier ]</p> <p>[PropertyQualifierConceptCode1 = C25346 ]</p> <p>[PropertyQualifierConceptCode2 = C63426 ]</p> <p>[PropertyQualifierConceptDefinition1 = A grouping of things based on shared common attributes. ]</p> <p>[PropertyQualifierConceptDefinition2 = The information object and the service class are the two fundamental components of DICOM. Information objects define the core contents of medical imaging, and service classes define what to do with those contents. The service classes and information objec ]</p> <p>[PropertyQualifierConceptDefinition2_2 = ts are combined to form the functional units of DICOM. This combination is called a service-object pair. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Class ]</p> <p>[PropertyQualifierConceptPreferredName2 = Service-Object Pair ]</p>
<b>referencedSopInstanceUId II</b> Private	The Service Object Pair Instance Unique Identifier of the image that Segmentation is referenced.	<p><i>Default:</i></p> <p>[CADSR_Description = The Service Object Pair Instance Unique Identifier of the image that Segmentation is referenced. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = The Service Object Pair Instance Unique Identifier of the image that Segmentation is</p>

Attribute	Notes	Constraints and tags
		<p>referenced. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C70663 ]</p> <p>[<u>PropertyConceptDefinition</u> = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o ]</p> <p>[<u>PropertyConceptDefinition_2</u> = r body of data. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Unique Identifier ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C48364 ]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C63426 ]</p> <p>[<u>PropertyQualifierConceptCode3</u> = C48294 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = An occurrence of something. ]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = The information object and the service class are the two fundamental components of DICOM. Information objects define the core contents of medical imaging, and service classes define what to do with those contents. The service classes and information objec ]</p> <p>[<u>PropertyQualifierConceptDefinition2_2</u> = ts are combined to form the functional units of DICOM. This combination is called a service-object pair. ]</p> <p>[<u>PropertyQualifierConceptDefinition3</u> = Something referred to; the object of a reference. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource3</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Instance ]</p> <p>[<u>PropertyQualifierConceptPreferredName2</u> = Service-Object Pair ]</p> <p>[<u>PropertyQualifierConceptPreferred</u></p>

Attribute	Notes	Constraints and tags
<b>segmentNumber</b> INT Private	Identification number of the segment. The value of Segment Number (0062,0004) shall be unique within the Segmentation instance in which it is created.	<p><i>Default:</i></p> <p>[CADSR_Description = Identification number of the segment. The value of Segment Number (0062,0004) shall be unique within the Segmentation instance in which it is created.]</p> <p>[CADSR_VD_ID = 2803195]</p> <p>[CADSR_VD_VERSION = 1.0]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[description = Identification number of the segment. The value of Segment Number (0062,0004) shall be unique within the Segmentation instance in which it is created.]</p> <p>[OWNER REVIEWED = 1]</p> <p>[PropertyConceptCode = C25337]</p> <p>[PropertyConceptDefinition = A numeral or string of numerals expressing value, quantity, or identification.]</p> <p>[PropertyConceptDefinitionSource = NCI]</p> <p>[PropertyConceptPreferredName = Number]</p> <p>[PropertyQualifierConceptCode1 = C45312]</p> <p>[PropertyQualifierConceptDefinition1 = One of the parts into which something naturally divides.]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI]</p> <p>[PropertyQualifierConceptPreferredName1 = Segment]</p>

### Operations

Method	Notes	Parameters
<b>GetSopInstanceUid()</b> II Public	The Service Object Pair Instance Unique Identifier of the Segmentation.	
<b>SetSopInstanceUid()</b> void	The Service Object Pair Instance Unique	<b>II</b> [in] newVal

Method	Notes	Parameters
Public	Identifier of the Segmentation.	
<b>GetSopClassUid() II</b> Public	Uniquely identifies the Service Object Pair (SOP) Class. A class represents a type of DICOM object, e.g. Segmentation Storage Class = 1.2.840.10008.5.1.4.1.1.66.4.	
<b>SetSopClassUid() void</b> Public	Uniquely identifies the Service Object Pair (SOP) Class. A class represents a type of DICOM object, e.g. Segmentation Storage Class = 1.2.840.10008.5.1.4.1.1.66.4.	<b>I</b> [in] newVal
<b>GetReferencedSopInstanceUid() II</b> Public	The Service Object Pair Instance Unique Identifier of the image that Segmentation is referenced.	
<b>SetReferencedSopInstanceUid() void</b> Public	The Service Object Pair Instance Unique Identifier of the image that Segmentation is referenced.	<b>I</b> [in] newVal
<b>GetSegmentNumber()</b> INT Public	Identification number of the segment. The value of Segment Number (0062,0004) shall be unique within the Segmentation instance in which it is created.	
<b>SetSegmentNumber()</b> void Public	Identification number of the segment. The value of Segment Number (0062,0004) shall be unique within the Segmentation instance in which it is created.	<b>INT</b> [in] newVal

### DicomSegmentationEntityHasImagingObservationEntityStatement

Type:           **Class**    **ImageAnnotationStatement**

Status:          Proposed. Version 1.0. Phase 1.0.

Package:       AIM      **Keywords:**

Detail:          Created on 12/21/2011. Last modified on 1/7/2013.

GUID:          {5F0A1F82-DA1C-4394-8FF8-7BE67C4E9CB7}

A DICOM segmentation object can have an imaging observation to further describe the segmentation object.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = A DICOM segmentation object can have an imaging observation to further describe the segmentation object..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.

- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C25598.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C80146.
- ObjectClassQualifierConceptCode6 = C49059.
- ObjectClassQualifierConceptDefinition1 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = The process of assigning a label to every pixel in an image such that pixels with the same label share certain visual characteristics, allowing the image to be partitioned into multiple segments (e.g., boundaries, lines, curves)..
- ObjectClassQualifierConceptDefinition6 = A comprehensive set of standards for communications between medical imaging devices, including handling, storing and transmitting information in medical imaging. It includes a file format definition and a network communication protocol..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Observation.

- ObjectClassQualifierConceptPreferredName2 = Image.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Image Segmentation.
- ObjectClassQualifierConceptPreferredName6 = DICOM.
- OWNER\_REVIEWED = 1.

### ***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public DicomSegmentationEntityHasImagingObservationEntityStatement	Public ImageAnnotationStatement	

### ***Entity***

**Type:** **Class**  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM      **Keywords:**  
**Detail:** *Created on 11/14/2011. Last modified on 11/21/2012.*  
**GUID:** {8AD8CBA1-7813-4e49-B49A-66A25C7FD764}

An Entity abstract class represents an existence of thing, concept, observation, calculation, measurement and graphical drawing in AIM.

### ***Custom Properties***

- isActive = False

### ***Tagged Values***

- CADSR\_Description = An Entity abstract class represents an existence of thing, concept, observation, calculation, measurement and graphical drawing in AIM. .
- CURATOR\_REVIEWED = 1.
- description = An Entity abstract class represents an existence of thing, concept, observation, calculation, measurement and graphical drawing in AIM. .
- documentation = An Entity abstract class represents an existence of thing, concept, observation, calculation, measurement and graphical drawing in AIM. .
- ObjectClassConceptCode = C51070.

- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.
- OWNER REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public InferenceEntity	Public Entity	
<b>Generalization</b> Source -> Destination	Public CalculationEntity	Public Entity	
<b>Generalization</b> Source -> Destination	Public ImageReferenceEntity	Public Entity	
<b>Generalization</b> Source -> Destination	Public SegmentationEntity	Public Entity	
<b>Generalization</b> Source -> Destination	Public TaskContextEntity	Public Entity	
<b>Generalization</b> Source -> Destination	Public AnnotationEntity	Public Entity	
<b>Generalization</b> Source -> Destination	Public ImagingObservationEnt ity	Public Entity	
<b>Generalization</b> Source -> Destination	Public AnnotationRoleEntity	Public Entity	
<b>Generalization</b> Source -> Destination	Public ImagingPhysicalEntity	Public Entity	
<b>Generalization</b> Source -> Destination	Public MarkupEntity	Public Entity	
<b>Generalization</b> Source -> Destination	Public LesionObservationEntit y	Public Entity	

**Attributes**

Attribute	Notes	Constraints and tags

Attribute	Notes	Constraints and tags
<b>uniqueIdentifier</b> II Private	An identifier string that can either be a string representation such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a specific subtype such as Imaging Physical Entity, Imaging Observation, Calculation, Image Reference, etc.	<p><i>Default:</i></p> <p>[CADSR_Description = An identifier string that can either be a string representation such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a specific subtype such as Imaging Physical Entity, Imaging Observation, Calculation, Image Reference, etc.]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C70663 ]</p> <p>[PropertyConceptDefinition = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o ]</p> <p>[PropertyConceptDefinition_2 = r body of data. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Unique Identifier ]</p>

***Operations***

Method	Notes	Parameters
<b>GetUniqueIdentifier()</b> II Public	An identifier string that can either be a string representation such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a specific subtype such as Imaging Physical Entity, Imaging Observation, Calculation, Image Reference and	
<b>SetUniqueIdentifier()</b> void Public	An identifier string that can either be a string representation such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a specific subtype such as Imaging Physical Entity, Imaging Observation, Calculation, Image Reference and	<b>I</b> [in] newVal

***GeneralImage*****Type:****Class****Status:**

Proposed. Version 1.0. Phase 1.0.

**Package:**AIM      **Keywords:**

*Detail:* Created on 5/29/2012. Last modified on 11/21/2012.

*GUID:* {04D863BD-5241-4e68-8178-3F885D650E95}

General Image specifies the Attributes that identify and describe an image within a particular series.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = General Image specifies the Attributes that identify and describe an image within a particular series..
- CURATOR REVIEWED = 1.
- documentation = General Image specifies the Attributes that identify and describe an image within a particular series..
- ObjectClassConceptCode = C19477.
- ObjectClassConceptDefinition = Any record of a medical imaging event whether physical or electronic..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Medical Image.
- ObjectClassQualifierConceptCode1 = C63764.
- ObjectClassQualifierConceptDefinition1 = Widespread, broadly dispersed, common..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Generalized.
- OWNER REVIEWED = 1.

#### Connections

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private image Image	Private generalImage GeneralImage	

#### Attributes

Attribute	Notes	Constraints and tags

Attribute	Notes	Constraints and tags
<b>patientOrientationColumn</b> <b>n ST</b> Private [0..1]	<p>The Patient Orientation relative to the image plane shall be specified by two values that designate the anatomical direction of the positive row axis (left to right or horizontal) and the positive column axis (top to bottom or vertical). This attribute store vertical value. The value may come from DICOM tag 0020,0020.</p> <p>The first entry is the direction of the rows, given by the direction of the last pixel in the first row from the first pixel in that row. The second entry is the direction of the columns, given by the direction of the last pixel in the first column from the first pixel in that column.</p>	<p><i>Default:</i></p> <p>[CADSR_Description = The Patient Orientation relative to the image plane shall be specified by two values that designate the anatomical direction of the positive row axis (left to right or horizontal) and the positive column axis (top to bottom or vertical). This attribute st ]</p> <p>[CADSR_Description2 = ore vertical value. The value may come from DICOM tag 0020,0020.</p> <p>The first entry is the direction of the rows, given by the direction of the last pixel in the first row from the first pixel in that row. The second entry is the direction of the columns, ]</p> <p>[CADSR_Description3 = en by the direction of the last pixel in the first column from the first pixel in that column. ]</p> <p>[CURATOR_REVIEWED = 1 ]</p> <p>[OWNER_REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C43379 ]</p> <p>[PropertyConceptDefinition = An arrangement of objects one under another in a line. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Column ]</p> <p>[PropertyQualifierConceptCode1 = C45788 ]</p> <p>[PropertyQualifierConceptCode2 = C16960 ]</p> <p>[PropertyQualifierConceptDefinition1 = Position or alignment relative to points of the compass or other specific directions. ]</p> <p>[PropertyQualifierConceptDefinition2 = A person who receives medical attention, care, or treatment, or who is registered with medical professional or institution with the purpose to receive medical care when necessary. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI ]</p> <p>[PropertyQualifierConceptPreferred</p>

Attribute	Notes	Constraints and tags
<b>patientOrientationRow</b> ST Private [0..1]	<p>The Patient Orientation relative to the image plane shall be specified by two values that designate the anatomical direction of the positive row axis (left to right or horizontal) and the positive column axis (top to bottom or vertical). This attribute store horizontal value. The value may come from DICOM tag 0020,0020.</p> <p>The first entry is the direction of the rows, given by the direction of the last pixel in the first row from the first pixel in that row. The second entry is the direction of the columns, given by the direction of the last pixel in the first column from the first pixel in that column.</p>	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = The Patient Orientation relative to the image plane shall be specified by two values that designate the anatomical direction of the positive row axis (left to right or horizontal) and the positive column axis (top to bottom or vertical). This attribute st ]</p> <p>[<u>CADSR_Description2</u> = ore horizontal value. The value may come from DICOM tag 0020,0020.</p> <p>The first entry is the direction of the rows, given by the direction of the last pixel in the first row from the first pixel in that row. The second entry is the direction of the column ]</p> <p>[<u>CADSR_Description3</u> = given by the direction of the last pixel in the first column from the first pixel in that column. ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C43378 ]</p> <p>[<u>PropertyConceptDefinition</u> = An arrangement of objects side by side in a line. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Row ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C45788 ]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C16960 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = Position or alignment relative to points of the compass or other specific directions. ]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = A person who receives medical attention, care, or treatment, or who is registered with medical professional or institution with the ]</p>

Attribute	Notes	Constraints and tags
		<p>purpose to receive medical care when necessary. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Orientation ]</p> <p>[<u>PropertyQualifierConceptPreferredName2</u> = Patient ]</p>

**Operations**

Method	Notes	Parameters
<b>GetPatientOrientationColumn()</b> ST Public	<p>The Patient Orientation relative to the image plane shall be specified by two values that designate the anatomical direction of the positive row axis (left to right or horizontal) and the positive column axis (top to bottom or vertical). This attribute store vertical value. The value may come from DICOM tag 0020,0020.</p> <p>The first entry is the direction of the rows, given by the direction of the last pixel in the first row from the first pixel in that row. The second entry is the direction of the columns, given by the direction of the last pixel in the first column from the first pixel in that column.</p>	
<b>SetPatientOrientationColumn()</b> void Public	<p>The Patient Orientation relative to the image plane shall be specified by two values that designate the anatomical direction of the positive row axis (left to right or horizontal) and the positive column axis (top to bottom or vertical). This attribute store vertical value. The value may come from DICOM tag 0020,0020.</p> <p>The first entry is the direction of the rows, given by the direction of the last pixel in the first row from the first pixel in that row. The second entry is the direction of the columns, given by the direction of the last pixel in the first column from the first pixel in that column.</p>	ST [in] newVal
<b>GetPatientOrientationRow()</b> ST Public	<p>The Patient Orientation relative to the image plane shall be specified by two values that designate the anatomical direction of the positive row axis (left to right or horizontal) and the positive column axis (top to bottom or vertical). This attribute store horizontal value. The value may come from DICOM tag 0020,0020.</p> <p>The first entry is the direction of the rows,</p>	

Method	Notes	Parameters
	given by the direction of the last pixel in the first row from the first pixel in that row. The second entry is the direction of the columns, given by the direction of the last pixel in the first column from the first pixel in that column.	
<b>SetPatientOrientationRo</b> w() void Public	The Patient Orientation relative to the image plane shall be specified by two values that designate the anatomical direction of the positive row axis (left to right or horizontal) and the positive column axis (top to bottom or vertical). This attribute store horizontal value. The value may come from DICOM tag 0020,0020.  The first entry is the direction of the rows, given by the direction of the last pixel in the first row from the first pixel in that row. The second entry is the direction of the columns, given by the direction of the last pixel in the first column from the first pixel in that column.	<b>ST</b> [in] newVal

### *GeneralLesionObservationEntity*

Type:           **Class**    LesionObservationEntity

Status:         Proposed. Version 1.0. Phase 1.0.

Package:       AIM      Keywords:

Detail:          Created on 9/21/2012. Last modified on 1/2/2013.

GUID:           {73ECBF7D-258F-45ec-8485-B2A52FF02BA8}

This class contains general observations made about lesions in clinical trial results and day-to-day clinical treatment that are not specific to time point.

For detail information: See DICOM Clinical Trials Results Reporting *Supplement (Working group 18)*

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = The class stores observations made about lesions in both clinical trial and day-to-day clinical treatments..
- CADSR\_Inherited.isAdditionalObservation.OWNER REVIEWED = 1.
- CADSR\_Inherited.lesionUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.

- documentation = The class stores observations made about lesions in both clinical trial and day-to-day clinical treatments..
- ObjectClassConceptCode = C51070.
- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.
- ObjectClassQualifierConceptCode1 = C25598.
- ObjectClassQualifierConceptCode2 = C3824.
- ObjectClassQualifierConceptCode3 = C63764.
- ObjectClassQualifierConceptDefinition1 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition2 = A localized pathological or traumatic structural change, damage, deformity, or discontinuity of tissue, organ, or body part..
- ObjectClassQualifierConceptDefinition3 = Widespread, broadly dispersed, common..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Observation.
- ObjectClassQualifierConceptPreferredName2 = Lesion.
- ObjectClassQualifierConceptPreferredName3 = Generalized.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public GeneralLesionObservationEntity	Public LesionObservationEntity	y

**Attributes**

Attribute	Notes	Constraints and tags
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Attribute	Notes	Constraints and tags
<b>trackingIdentifier</b> ST Private	<p>The definition is “A text label used for tracking a finding or feature, potentially across multiple reporting objects, over time. This label shall be unique within the domain in which it is used.” Shall be the same for all instances of the same lesion with the same Tracking Unique Identifier.</p>	<p><i>Default:</i></p> <p>[CADSR_Description = The definition is a text label used for tracking a finding or feature, potentially across multiple reporting objects, over time. This label shall be unique within the domain in which it is used.]  [CURATOR REVIEWED = 1]  [description = The definition is a text label used for tracking a finding or feature, potentially across multiple reporting objects, over time. This label shall be unique within the domain in which it is used.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C25364]  [PropertyConceptDefinition = One or more characters used to identify, name, or characterize the nature, properties, or contents of a thing.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Identifier]  [PropertyQualifierConceptCode1 = C45275]  [PropertyQualifierConceptDefinition1 = The act or process of following a person, animal, or object through space or time.]  [PropertyQualifierConceptDefinitionSource1 = NCI]  [PropertyQualifierConceptPreferredName1 = Tracking]</p>
<b>lesionType</b> CD Private	Lesion type.	<p><i>Default:</i></p> <p>[CADSR_Description = Lesion type.]  [CURATOR REVIEWED = 1]  [description = Lesion type.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C25284]  [PropertyConceptDefinition = Something distinguishable as an identifiable class based on common qualities.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Type]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyQualifierConceptCode1 = C3824 ]</p> <p>[PropertyQualifierConceptDefinition1 = A localized pathological or traumatic structural change, damage, deformity, or discontinuity of tissue, organ, or body part. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Lesion ]</p>
<b>reconstructionInterval</b> CD Private [0..1]	Used to record that user has overridden rules related to minimum lesion size relative to reconstruction interval. Required if "Lesion Type" is "Target lesion" and "Reconstruction Interval" is false for the image referenced by the baseline defining this lesion.	<p><i>Default:</i></p> <p>[CADSR_Description = Used to record that user has overridden rules related to minimum lesion size relative to reconstruction interval. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Used to record that user has overridden rules related to minimum lesion size relative to reconstruction interval. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C25543 ]</p> <p>[PropertyConceptDefinition = The period of time or the distance separating two instances, events, or occurrences. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Interval ]</p> <p>[PropertyQualifierConceptCode1 = C25351 ]</p> <p>[PropertyQualifierConceptDefinition1 = Surgical restoration of function or form of a part. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Reconstructive Surgery ]</p>
<b>laterality</b> CD Private [0..1]	The value set contains codes for right, left, both and unilateral (unpaired), hence is always required for coded finding sites. G-C171, SRT, "Laterality"	<p><i>Default:</i></p> <p>[CADSR_Description = The value set contains codes for right, left, both and unilateral (unpaired), hence is always required for coded finding sites. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = The value set contains codes for right, left, both and unilateral (unpaired), hence is</p>

Attribute	Notes	Constraints and tags
		always required for coded finding sites. [OWNER REVIEWED = 1 ] [PropertyConceptCode = C25185 ] [PropertyConceptDefinition = Dominant use or manifestations of one side of the body versus the other; referring to a side of the body or of a structure. ] [PropertyConceptDefinitionSource = NCI ] [PropertyConceptPreferredName = Laterality ]

***Operations***

Method	Notes	Parameters
<b>GetTrackingIdentifier()</b> ST Public	The definition is “A text label used for tracking a finding or feature, potentially across multiple reporting objects, over time. This label shall be unique within the domain in which it is used.” Shall be the same for all instances of the same lesion with the same Tracking Unique Identifier.	
<b>SetTrackingIdentifier()</b> void Public	The definition is “A text label used for tracking a finding or feature, potentially across multiple reporting objects, over time. This label shall be unique within the domain in which it is used.” Shall be the same for all instances of the same lesion with the same Tracking Unique Identifier.	<b>ST</b> [in] newVal
<b>GetLesionType()</b> CD Public	Lesion type.	
<b>SetLesionType()</b> void Public	Lesion type.	<b>CD</b> [in] newVal
<b>GetReconstructionInterval()</b> CD Public	Used to record that user has overridden rules related to minimum lesion size relative to reconstruction interval. Required if “Lesion Type” is “Target lesion” and “Reconstruction Interval” is false for the image referenced by the baseline defining this lesion.	
<b>SetReconstructionInterval()</b> void Public	Used to record that user has overridden rules related to minimum lesion size relative to reconstruction interval. Required if “Lesion Type” is “Target lesion” and “Reconstruction Interval” is false for the image referenced by the baseline defining this lesion.	<b>CD</b> [in] newVal
<b>GetLaterality()</b> CD Public	The value set contains codes for right, left, both and unilateral (unpaired), hence is always	

Method	Notes	Parameters
	required for coded finding sites. G-C171, SRT, “Laterality”	
<b>SetLaterality()</b> void Public	The value set contains codes for right, left, both and unilateral (unpaired), hence is always required for coded finding sites. G-C171, SRT, “Laterality”	<b>CD</b> [in] newVal

### *GeneralLesionObservationEntityHasImagingPhysicalEntityStatement*

Type:           **Class**     [\*\*ImageAnnotationStatement\*\*](#)

Status:         Proposed. Version 1.0. Phase 1.0.

Package:       AIM       **Keywords:**

Detail:          *Created on 9/21/2012. Last modified on 11/21/2012.*

GUID:           {F373DBA6-1130-4fe5-93A4-2674C0D68531}

The class is used to record a relationship between a general lesion observation and imaging physical entity. Each lesion observation can only be directly related to one imaging physical entity.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = The class is used to record a relationship between a general lesion observation and imaging physical entity. Each lesion observation can only be directly related to one imaging physical entity..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = The class is used to record a relationship between a general lesion observation and imaging physical entity. Each lesion observation can only be directly related to one imaging physical entity..
- ObjectClassConceptCode = C49154.
- ObjectClassConceptDefinition = A verbal and/or written message that asserts, affirms, or declares something..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Statement.
- ObjectClassQualifierConceptCode1 = C51070.
- ObjectClassQualifierConceptCode2 = C25618.

- ObjectClassQualifierConceptCode3 = C48179.
- ObjectClassQualifierConceptCode4 = C101282.
- ObjectClassQualifierConceptCode5 = C51070.
- ObjectClassQualifierConceptCode6 = C25598.
- ObjectClassQualifierConceptCode7 = C3824.
- ObjectClassQualifierConceptCode8 = C63764.
- ObjectClassQualifierConceptDefinition1 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition2 = Having substance or material existence; concerned with material things; of or pertaining to the body as distinguished from the mind or spirit..
- ObjectClassQualifierConceptDefinition3 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition4 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition5 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition6 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition7 = A localized pathological or traumatic structural change, damage, deformity, or discontinuity of tissue, organ, or body part..
- ObjectClassQualifierConceptDefinition8 = Widespread, broadly dispersed, common..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptDefinitionSource7 = NCI.
- ObjectClassQualifierConceptDefinitionSource8 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Entity.
- ObjectClassQualifierConceptPreferredName2 = Physical.
- ObjectClassQualifierConceptPreferredName3 = Image.
- ObjectClassQualifierConceptPreferredName4 = Have.

- ObjectClassQualifierConceptPreferredName5 = Entity.
- ObjectClassQualifierConceptPreferredName6 = Observation.
- ObjectClassQualifierConceptPreferredName7 = Lesion.
- ObjectClassQualifierConceptPreferredName8 = Generalized.
- OWNER\_REVIEWED = 1.

### ***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public GeneralLesionObservationEntityHasImagingPhysicalEntityStatement	Public ImageAnnotationStatement	

### ***Image***

Type:	<b>Class</b>
Status:	Proposed. Version 1.0. Phase 1.0.
Package:	AIM <b>Keywords:</b>
Detail:	<i>Created on 12/16/2011. Last modified on 11/21/2012.</i>
GUID:	{116DAC53-1736-429b-ABF4-F36B8D35C06E}

The Image class references the pixel data of images. It contains two UIDs. The first UID can be used to identify a type of image e.g. CT, MR, CR, etc. It is based on DICOM SOP Class UID. The second UID uniquely identifies an image. An image is defined by its image plane, pixel data characteristics, gray scale and/or color mapping characteristics, overlay planes and modality specific characteristics (acquisition parameters and image creation information).

A single image may contain a single frame of pixels or as multiple frames of pixel data. The frames of a Multi-frame image (a cine run or the slices of a volume) are sequentially ordered and share a number of common properties.

### ***Custom Properties***

- isActive = False

### ***Tagged Values***

- CADSR\_Description = An in vivo imaging of a human, an animal, visible light images, etc. In cases where imaging modalities produce multiple slices (e.g. CT or MR scans), this represents one slice..
- CURATOR\_REVIEWED = 1.
- documentation = An in vivo imaging of a human. In cases where imaging modalities produce multiple slices (e.g. CT or MR scans), this represents one slice..
- ObjectClassConceptCode = C48179.

- ObjectClassConceptDefinition = Any record of an imaging event whether physical or electronic..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Image.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private image Image	Private imagePlane ImagePlane	
<b>Association</b> Bi-Directional	Private imageSeries ImageSeries	Private imageCollection Image	
<b>Association</b> Bi-Directional	Private image Image	Private generalImage GeneralImage	

**Attributes**

Attribute	Notes	Constraints and tags
<b>sopClassUid II</b> Private	Unique identifier specific for a Service-Object Pair (SOP) class, as specified in the DICOM standard.	<p><i>Default:</i></p> <p>[CADSR_Description = Unique identifier specific for a Service-Object Pair (SOP) class, as specified in the DICOM standard.]  [CADSR_VD_ID = 2803193]  [CADSR_VD_VERSION = 1.0]  [CURATOR_REVIEWED = 1]  [description = Unique identifier specific for a Service-Object Pair (SOP) class, as specified in the DICOM standard.]  [OWNER_REVIEWED = 1]  [PropertyConceptCode = C25364]  [PropertyConceptDefinition = One or more characters used to identify, name, or characterize the nature, properties, or contents of a thing.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Identifier]  [PropertyQualifierConceptCode1 = C45282]  [PropertyQualifierConceptCode2 = C25346]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyQualifierConceptCode3 = C63426 ]</p> <p>[PropertyQualifierConceptDefinition1 = The single one of its kind. ]</p> <p>[PropertyQualifierConceptDefinition2 = A grouping of things based on shared common attributes. ]</p> <p>[PropertyQualifierConceptDefinition3 = The information object and the service class are the two fundamental components of DICOM. Information objects define the core contents of medical imaging, and service classes define what to do with those contents. The service classes and information object ]</p> <p>[PropertyQualifierConceptDefinition3_2 = ts are combined to form the functional units of DICOM. This combination is called a service-object pair. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource3 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Unique ]</p> <p>[PropertyQualifierConceptPreferredName2 = Class ]</p> <p>[PropertyQualifierConceptPreferredName3 = Service-Object Pair ]</p>
<b>sopInstanceUid II</b> Private	Unique identifier for a Service-Object Pair (SOP) instance, as specified in a DICOM tag.	<p><i>Default:</i></p> <p>[CADSR_Description = Unique identifier for a Service-Object Pair (SOP) instance, as specified in a DICOM tag. ]</p> <p>[CADSR_VD_ID = 2803193 ]</p> <p>[CADSR_VD_VERSION = 1.0 ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Unique identifier for a Service-Object Pair (SOP) instance, as specified in a DICOM tag. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C25364 ]</p> <p>[PropertyConceptDefinition = One or more characters used to identify, name, or characterize the nature, properties, or contents of a thing. ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Identifier ]</p> <p>[PropertyQualifierConceptCode1 = C45282 ]</p> <p>[PropertyQualifierConceptCode2 = C48364 ]</p> <p>[PropertyQualifierConceptCode3 = C63426 ]</p> <p>[PropertyQualifierConceptDefinition1 = The single one of its kind. ]</p> <p>[PropertyQualifierConceptDefinition2 = An occurrence of something. ]</p> <p>[PropertyQualifierConceptDefinition3 = The information object and the service class are the two fundamental components of DICOM. Information objects define the core contents of medical imaging, and service classes define what to do with those contents. The service classes and information objects are combined to form the functional units of DICOM. This combination is called a service-object pair. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource3 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Unique ]</p> <p>[PropertyQualifierConceptPreferredName2 = Instance ]</p> <p>[PropertyQualifierConceptPreferredName3 = Service-Object Pair ]</p>

***Operations***

Method	Notes	Parameters
<b>GetSopClassUid()</b> II Public	Unique identifier specific for a Service-Object Pair (SOP) class, as specified in the DICOM standard.	
<b>SetSopClassUid()</b> void Public	Unique identifier specific for a Service-Object Pair (SOP) class, as specified in the DICOM standard.	<b>I</b> [in] newVal
<b>GetSopInstanceId()</b> II		

Method	Notes	Parameters
Public		
<b>SetSopInstanceUid()</b> void Public		<b>I</b> [in] newVal
<b>GetGeneralImage()</b> GeneralImage Public		
<b>SetGeneralImage()</b> void Public		<b>GeneralImage</b> [in] generalImage
<b>GetImagePlane()</b> ImagePlane Public		
<b>SetImagePlane()</b> void Public		<b>ImagePlane</b> [in] imagePlane

### *ImageAnnotationCollection*

**Type:** [Class](#) [AnnotationCollection](#)  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM [Keywords:](#)  
**Detail:** *Created on 12/5/2011. Last modified on 11/21/2012.*  
**GUID:** {FF5ABB66-BCB3-49cc-A058-F5F7F177C9CF}

This class is one of two root classes in the model. It inherits all AnnotationCollection properties. This class signifies that all members of a collection is of type ImageAnnotation.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = This class is one of two root classes in the model. It inherits all AnnotationCollection properties. This class signifies that all members of a collection is of type ImageAnnotation. .
- CADSR\_Inherited.aimVersion.OWNER REVIEWED = 1.
- CADSR\_Inherited.dateTime.OWNER REVIEWED = 1.
- CADSR\_Inherited.description.OWNER REVIEWED = 1.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = This class is one of two root classes in the model. It inherits all AnnotationCollection properties. This class signifies that all members of a collection is of type ImageAnnotation. .
- ObjectClassConceptCode = C101123.

- ObjectClassConceptDefinition = A set of annotations, or comments about an idea, subject or item..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Annotation Collection.
- ObjectClassQualifierConceptCode1 = C48179.
- ObjectClassQualifierConceptDefinition1 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Image.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private imageAnnotationCollection ImageAnnotationCollection	Private imageAnnotations ImageAnnotation	
<b>Association</b> Bi-Directional	Private imageAnnotation ImageAnnotationCollection	Private person Person	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationCollection	Public AnnotationCollection	

**Operations**

Method	Notes	Parameters
<b>GetImageAnnotation()</b> ImageAnnotation[] Public		
<b>SetImageAnnotation()</b> void Public		<b>ImageAnnotation[] [in]</b> imageAnnotation
<b>SetPerson()</b> void Public		<b>Person [in]</b> person
<b>GetPerson()</b> Person Public		

***ImageAnnotationHasAnnotationRoleEntityStatement***

Type:	Class	<u>AnnotationOfAnnotationStatement</u>
Status:	Proposed.	Version 1.0. Phase 1.0.
Package:	AIM	<u>Keywords:</u>
Detail:		<i>Created on 12/19/2011. Last modified on 1/2/2013.</i>
GUID:		{B748951F-C65E-4810-8B57-ED0D2921C135}

This class is used to define an annotation role to an image annotation. For example, an image annotation can be a based line in one study. But, it also can be a follow-up in another study.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = This class is used to define an annotation role to an image annotation. For example, an image annotation can be a based line in one study. But, it also can be a follow-up in another study..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = This class is used to define an annotation role to an image annotation. For example, an image annotation can be a based line in one study. But, it also can be a follow-up in another study..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C48835.
- ObjectClassQualifierConceptCode2 = C44272.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C44272.
- ObjectClassQualifierConceptCode5 = C48179.
- ObjectClassQualifierConceptDefinition1 = The usual or expected function of something; the part something plays in an action or event..
- ObjectClassQualifierConceptDefinition2 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..

- ObjectClassQualifierConceptDefinition4 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition5 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Role.
- ObjectClassQualifierConceptPreferredName2 = Annotation.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Annotation.
- ObjectClassQualifierConceptPreferredName5 = Image.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasA nnotationRoleEntityStat ement	Public AnnotationOfAnnotatio nStatement	

***ImageAnnotationHasCalculationEntityStatement***

**Type:**      **Class**      **ImageAnnotationStatement**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      *Created on 12/15/2011. Last modified on 1/2/2013.*  
**GUID:**      {EFCC46F4-EB6D-404a-86C9-0B4F68E56E55}

An image annotation can have a calculation result associate with it.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An image annotation can have a calculation result associate with it..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C54125.
- ObjectClassQualifierConceptCode2 = C101282.
- ObjectClassQualifierConceptCode3 = C44272.
- ObjectClassQualifierConceptCode4 = C48179.
- ObjectClassQualifierConceptDefinition1 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinition2 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition3 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition4 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Calculation.
- ObjectClassQualifierConceptPreferredName2 = Have.
- ObjectClassQualifierConceptPreferredName3 = Annotation.
- ObjectClassQualifierConceptPreferredName4 = Image.
- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasCalculationEntityStatement	Public ImageAnnotationStatement	

***ImageAnnotationHasChildImageAnnotationStatement*****Type:**      **Class**    **ImageAnnotationStatement****Status:**      Proposed. Version 1.0. Phase 1.0.**Package:**      AIM    **Keywords:****Detail:**      Created on 12/15/2011. Last modified on 1/2/2013.**GUID:**      {B78A1535-33E0-44e1-B8B6-5E6EEA4FD56F}

An image annotation can have a child image annotation. This represents a hierarchical structure between images. A child image implicitly has a parent image. A use case of this type of statement is a diagnostic mammogram image has another magnification image associate with the diagnostic image. Other use case in a whole slide image with 10X magnification factor may have a section of the image magnify and store as a separate image. Both images can have parent-child relationship.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An image annotation can have a child image annotation. This represents a hierarchical structure between images. A child image implicitly has a parent image. .
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An image annotation can have a child image annotation. This represents a hierarchical structure between images. A child image implicitly has a parent image. .
- ObjectClassConceptCode = C101135.
- ObjectClassConceptDefinition = A statement used to describe something found and to be addressed on an image or series of images. It describes a thing found, measured and graphically annotated on an image or images from the same series. It consists of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Image Annotation Statement.

- ObjectClassQualifierConceptCode1 = C90504.
- ObjectClassQualifierConceptCode2 = C101282.
- ObjectClassQualifierConceptCode3 = C44272.
- ObjectClassQualifierConceptCode4 = C48179.
- ObjectClassQualifierConceptDefinition1 = Lower in rank or importance, or dependent on something else..
- ObjectClassQualifierConceptDefinition2 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition3 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition4 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Subordinate.
- ObjectClassQualifierConceptPreferredName2 = Have.
- ObjectClassQualifierConceptPreferredName3 = Annotation.
- ObjectClassQualifierConceptPreferredName4 = Image.
- OWNER\_REVIEWS = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasChildImageAnnotationStatement	Public ImageAnnotationStatement	

***ImageAnnotationHasDicomImageReferenceEntityStatement*****Type:**      **Class**      **ImageAnnotationStatement****Status:**      Proposed. Version 1.0. Phase 1.0.**Package:**      AIM      **Keywords:****Detail:**      *Created on 12/15/2011. Last modified on 11/21/2012.***GUID:**      {5440326E-D0D3-41fb-A7E6-DEA24A7CA609}

An instance of image annotation can have DICOM image(s) of the same series.

#### **Custom Properties**

- isActive = False

#### **Tagged Values**

- CADSR\_Description = An instance of image annotation can have DICOM image(s) of the same series..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An instance of image annotation can have DICOM image(s) of the same series..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C48294.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptCode3 = C49059.
- ObjectClassQualifierConceptCode4 = C101282.
- ObjectClassQualifierConceptCode5 = C44272.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptDefinition1 = Something referred to; the object of a reference..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition3 = A comprehensive set of standards for communications between medical imaging devices, including handling, storing and transmitting information in medical imaging. It includes a file format definition and a network communication protocol..
- ObjectClassQualifierConceptDefinition4 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition5 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..

- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Reference Object.
- ObjectClassQualifierConceptPreferredName2 = Image.
- ObjectClassQualifierConceptPreferredName3 = DICOM.
- ObjectClassQualifierConceptPreferredName4 = Have.
- ObjectClassQualifierConceptPreferredName5 = Annotation.
- ObjectClassQualifierConceptPreferredName6 = Image.
- OWNER\_REVIEWED = 1.

### Connections

Connector	Source	Target	Notes
<u>Generalization</u> Source -> Destination	Public ImageAnnotationHasDicomImageReferenceEntityStatement	Public ImageAnnotationStatement	

### *ImageAnnotationHasDicomSegmentationEntityStatement*

**Type:**      **Class**    **ImageAnnotationStatement**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      *Created on 12/21/2011. Last modified on 1/2/2013.*  
**GUID:**      {F7B30F74-22A8-4b70-9DE7-667FA83910F8}

An image annotation can have one or more DICOM segmentation objects. An ImageAnnotationHasDICOMSegmentationEntityStatement represents a direct relationship between an image annotation and DICOM segmentation entity. If the image annotation has three DICOM segmentation entities, there need to be three ImageAnnotationHasDICOMSegmentationEntityStatements.

A use case:

A user found two nodules in a CT axial series, the user used a workstation to create two DICOM segmentation objects. The user annotated and stored the findings in AIM format with segmentation information.

Working with AIM:

1. Create image annotation instance.
2. Create DICOM image reference instance and its associated image study, image series and image instances.
3. An image annotation has the set of CT images in the series. We need to create a statement that associate image annotation with DICOM images.
  - \*\* Use : ImageAnnotationHasDICOMImageReferenceEntityStatement
  - \*\* The statement has the image annotation instance as subject and DICOM image reference instance as object.
4. Create two DICOM segmentation entity instances. Each instance contains a reference information about a DICOM segmentation object.
5. Create two statements of type ImageAnnotationHasDICOMSegmentationEntityStatement. Each statement has the same image annotation but different DICOM segmentation entity.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = An image annotation can have one or more DICOM segmentation objects. An ImageAnnotationHasDICOMSegmentationEntityStatement represents a direct relationship between an image annotation and DICOM segmentation entity. If the image annotation has three DICOM .
- CADSR\_Description2 = segmentation entities, there need to be three ImageAnnotationHasDICOMSegmentationEntityStatements.

A use case:

A user found two nodules in a CT axial series, the user used a workstation to create two DICOM segmentation objects. The user annotated and .

- CADSR\_Description3 = indings in AIM format with segmentation information.

Working with AIM:

1. Create image annotation instance.
  2. Create DICOM image reference instance and its associated image study, image series and image instances.
  3. An image annotation ha seCT s i.
- CADSR\_Description4 = series. We need to create a statement that associate image annotation with DICOM images.
    - \*\* Use : ImageAnnotationHasDICOMImageReferenceEntityStatement
    - \*\* The statement has the image annotation instance as subject and DIM image ference stanc e a.
  - CADSR\_Description5 = object.
  - 4. Create two DICOM segmentation entity instances. Each instance contains a reference information about a DICOM segmentation object.
  - 5. Create two statements of type ImageAnnotationHasDICOMSegmentationEntityStatemen Each statent has thsame image.
- CADSR\_Description6 = nnotation but different DICOM segmentation entity. .
  - CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWS = 1.
  - CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWS = 1.

- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C80146.
- ObjectClassQualifierConceptCode2 = C49059.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C44272.
- ObjectClassQualifierConceptCode5 = C48179.
- ObjectClassQualifierConceptDefinition1 = The process of assigning a label to every pixel in an image such that pixels with the same label share certain visual characteristics, allowing the image to be partitioned into multiple segments (e.g., boundaries, lines, curves)..
- ObjectClassQualifierConceptDefinition2 = A comprehensive set of standards for communications between medical imaging devices, including handling, storing and transmitting information in medical imaging. It includes a file format definition and a network communication protocol..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition5 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Image Segmentation.
- ObjectClassQualifierConceptPreferredName2 = DICOM.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Annotation.

- ObjectClassQualifierConceptPreferredName5 = Image.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasDi comSegmentationEntity Statement	Public ImageAnnotationState ment	

***ImageAnnotationHasGeneralLesionObservationEntityStatement***

Type:            Class     **ImageAnnotationStatement**

Status:        Proposed. Version 1.0. Phase 1.0.

Package:      AIM        **Keywords:**

Detail:        Created on 9/21/2012. Last modified on 1/2/2013.

GUID:        {24CDA50-1CDA-4041-856A-B3D541CF2D48}

An instance of image annotation may have one or more general lesion observations associate with it.

ImageAnnotationHasGeneralLesionObservationEntityStatement represents a direct relationship between an instance of image annotation and general lesion observation. If you have two general lesion observations on an image, you will need to create two statements.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An instance of image annotation may have general lesion observation associate with it.
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CURATOR\_REVIEWED = 1.
- documentation = An instance of image annotation may have general lesion observation associate with it.
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.

- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C25598.
- ObjectClassQualifierConceptCode2 = C3824.
- ObjectClassQualifierConceptCode3 = C63764.
- ObjectClassQualifierConceptCode4 = C101282.
- ObjectClassQualifierConceptCode5 = C44272.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptDefinition1 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition2 = A localized pathological or traumatic structural change, damage, deformity, or discontinuity of tissue, organ, or body part..
- ObjectClassQualifierConceptDefinition3 = Widespread, broadly dispersed, common..
- ObjectClassQualifierConceptDefinition4 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition5 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Observation.
- ObjectClassQualifierConceptPreferredName2 = Lesion.
- ObjectClassQualifierConceptPreferredName3 = Generalized.
- ObjectClassQualifierConceptPreferredName4 = Have.
- ObjectClassQualifierConceptPreferredName5 = Annotation.
- ObjectClassQualifierConceptPreferredName6 = Image.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasGeneralLesionObservationEntityStatement	Public ImageAnnotationStatement	

***ImageAnnotationHasImagingObservationEntityStatement*****Type:**      **Class**    **ImageAnnotationStatement****Status:**      Proposed. Version 1.0. Phase 1.0.**Package:**      AIM      **Keywords:****Detail:**      *Created on 12/15/2011. Last modified on 1/2/2013.***GUID:**      {C42AB47C-9EEC-46fa-A0D5-00C2E7BF19CD}

An image annotation can have imaging observation associate with it.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An image annotation can have imaging observation associate with it..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An image annotation can have imaging observation associate with it..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C25598.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptCode3 = C101282.

- ObjectClassQualifierConceptCode4 = C44272.
- ObjectClassQualifierConceptCode5 = C48179.
- ObjectClassQualifierConceptDefinition1 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition5 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Observation.
- ObjectClassQualifierConceptPreferredName2 = Image.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Annotation.
- ObjectClassQualifierConceptPreferredName5 = Image.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasImagingObservationEntity Statement	Public ImageAnnotationStatement	

***ImageAnnotationHasImagingPhysicalEntityStatement***Type:      **Class**      [ImageAnnotationStatement](#)

Status:      Proposed. Version 1.0. Phase 1.0.

Package:      AIM      **Keywords:** [Keywords](#)

*Detail:*      *Created on 12/15/2011. Last modified on 1/2/2013.*

*GUID:*      {7B67BFE1-4404-4440-B0B1-00885D7809D7}

An image annotation can have imaging physical entity associate with it.

#### **Custom Properties**

- isActive = False

#### **Tagged Values**

- CADSR\_Description = An image annotation can have imaging physical entity associate with it..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWS = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWS = 1.
- CURATOR\_REVIEWS = 1.
- documentation = An image annotation can have imaging physical entity associate with it..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C25618.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C44272.
- ObjectClassQualifierConceptCode5 = C48179.
- ObjectClassQualifierConceptDefinition1 = Having substance or material existence; concerned with material things; of or pertaining to the body as distinguished from the mind or spirit..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition5 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.

- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Physical.
- ObjectClassQualifierConceptPreferredName2 = Image.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Annotation.
- ObjectClassQualifierConceptPreferredName5 = Image.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasImagingPhysicalEntityStatement	Public ImageAnnotationState	

***ImageAnnotationHasInferenceEntityStatement***

Type:           **Class**    **ImageAnnotationStatement**

Status:         Proposed. Version 1.0. Phase 1.0.

Package:       AIM        **Keywords:**

Detail:          Created on 12/15/2011. Last modified on 1/2/2013.

GUID:           {27F2108B-E383-45d7-A3B5-7F209A4B58B7}

An image annotation can have a conclusion derived by interpreting image(s) and/or other supplemental information related to the image(s).

***Custom Properties***

- isActive = False

***Tagged Values***

- CADSR\_Description = An image annotation can have a conclusion derived by interpreting image(s) and/or other supplemental information related to the image(s)..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.

- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWS = 1.
- CURATOR\_REVIEWS = 1.
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C75591.
- ObjectClassQualifierConceptCode2 = C101282.
- ObjectClassQualifierConceptCode3 = C44272.
- ObjectClassQualifierConceptCode4 = C48179.
- ObjectClassQualifierConceptDefinition1 = The process by which conclusions are derived from stated facts by the application of logical rules..
- ObjectClassQualifierConceptDefinition2 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition3 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition4 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Inference.
- ObjectClassQualifierConceptPreferredName2 = Have.
- ObjectClassQualifierConceptPreferredName3 = Annotation.
- ObjectClassQualifierConceptPreferredName4 = Image.
- OWNER\_REVIEWS = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b>	Public	Public	

Connector	Source	Target	Notes
Source -> Destination	ImageAnnotationHasInferenceEntityStatement	ImageAnnotationStatement	

### *ImageAnnotationHasTextAnnotationEntityStatement*

Type: **Class** [\*\*ImageAnnotationStatement\*\*](#)

Status: Proposed. Version 1.0. Phase 1.0.

Package: AIM [\*\*Keywords:\*\*](#)

Detail: *Created on 12/15/2011. Last modified on 1/2/2013.*

GUID: {C610DCE6-D005-49da-A07C-258D48370CF7}

An image annotation can have a text annotation associate with it.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = An image annotation can have a text annotation associate with it..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An image annotation can have a text annotation associate with it..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C44272.
- ObjectClassQualifierConceptCode2 = C25704.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C44272.
- ObjectClassQualifierConceptCode5 = C48179.
- ObjectClassQualifierConceptDefinition1 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..

- ObjectClassQualifierConceptDefinition2 = The words of something written..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition5 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Annotation.
- ObjectClassQualifierConceptPreferredName2 = Text.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Annotation.
- ObjectClassQualifierConceptPreferredName5 = Image.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<u>Generalization</u> Source -> Destination	Public ImageAnnotationHasTextAnnotationEntityStatement	Public ImageAnnotationStatement	

***ImageAnnotationHasThreeDimensionGeometricShapeEntityStatement***

**Type:**      **Class**    [ImageAnnotationStatement](#)  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      *Created on 3/15/2012. Last modified on 1/2/2013.*  
**GUID:**      {F490FA08-1F28-429a-98A6-394F3A3A1B43}

An instance of image annotation may have one or more three-dimension graphical drawings associate with it. ImageAnnotationHasThreeDimensionGeometricShapeEntityStatement represents a direct relationship between an instance of image annotation and a drawing. If you have two drawings on an image, you will need to create two

statements.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An instance of image annotation may have one or more three dimension graphical drawings associate with it..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An instance of image annotation may have one or more three dimension graphical drawings associate with it..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C101119.
- ObjectClassQualifierConceptCode2 = C18005.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C44272.
- ObjectClassQualifierConceptCode5 = C48179.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition2 = The property of being measured and described using three orthogonal directions..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition5 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.

- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName2 = 3-Dimensional.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Annotation.
- ObjectClassQualifierConceptPreferredName5 = Image.
- OWNER\_REVIEWS = 1.

### Connections

Connector	Source	Target	Notes
<u>Generalization</u> Source -> Destination	Public ImageAnnotationHasThreeDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	

### *ImageAnnotationHasTimePointLesionObservationEntityStatement*

Type:           **Class**    ImageAnnotationStatement

Status:         Proposed. Version 1.0. Phase 1.0.

Package:       AIM       Keywords:

Detail:          Created on 9/21/2012. Last modified on 1/2/2013.

GUID:           {D23647D9-115C-4482-BE36-1B55BE87B68F}

An instance of image annotation may have one or more timepoint lesion observations associate with it.

ImageAnnotationHasTimePointLesionObservationEntityStatement represents a direct relationship between an instance of image annotation and timepoint lesion observation. If you have two general timepoint observations on an image, you will need to create two statements.

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = An instance of image annotation may have time point lesion observation associate with it..

- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An instance of image annotation may have time point lesion observation associate with it..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C25598.
- ObjectClassQualifierConceptCode2 = C3824.
- ObjectClassQualifierConceptCode3 = C68568.
- ObjectClassQualifierConceptCode4 = C101282.
- ObjectClassQualifierConceptCode5 = C44272.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptDefinition1 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition2 = A localized pathological or traumatic structural change, damage, deformity, or discontinuity of tissue, organ, or body part..
- ObjectClassQualifierConceptDefinition3 = A specific point in the time continuum, including those established relative to an event..
- ObjectClassQualifierConceptDefinition4 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition5 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.

- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Observation.
- ObjectClassQualifierConceptPreferredName2 = Lesion.
- ObjectClassQualifierConceptPreferredName3 = Timepoint.
- ObjectClassQualifierConceptPreferredName4 = Have.
- ObjectClassQualifierConceptPreferredName5 = Annotation.
- ObjectClassQualifierConceptPreferredName6 = Image.
- OWNER\_REVIEWED = 1.

### ***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasTi mePointLesionObservat ionEntityStatement	Public ImageAnnotationState ment	

### ***ImageAnnotationHasTwoDimensionGeometricShapeEntityStatement***

Type:           **Class**     **[ImageAnnotationStatement](#)**

Status:       Proposed. Version 1.0. Phase 1.0.

Package:      AIM       **Keywords:**

Detail:        Created on 12/15/2011. Last modified on 1/2/2013.

GUID:         {11C9E530-232C-4672-9E08-DFE5D3804B50}

An instance of image annotation may have one or more two-dimension graphical drawings associate with it. ImageAnnotationHasTwoDimensionGeometricShapeEntityStatement represents a direct relationship between an instance of image annotation and a drawing. If you have two drawings on an image, you will need to create two statements.

### ***Custom Properties***

- isActive = False

### ***Tagged Values***

- CADSR\_Description = An instance of image annotation may have one or more graphical drawings associate with it. ImageAnnotationHasGeometricShapeEntityStatement represents a direct relationship between an instance of image annotation and a drawing. .
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWED = 1.

- CURATOR REVIEWED = 1.
- documentation = An instance of image annotation may have one or more two dimension graphical drawings associate with it. ImageAnnotationHasTwoDimensionGeometricShapeEntityStatement represents a direct relationship between an instance of image annotation and a drawing..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C101119.
- ObjectClassQualifierConceptCode2 = C48282.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C44272.
- ObjectClassQualifierConceptCode5 = C48179.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition2 = The property of being measured and described using two orthogonal directions..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition5 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName2 = 2-Dimensional.
- ObjectClassQualifierConceptPreferredName3 = Have.

- ObjectClassQualifierConceptPreferredName4 = Annotation.
- ObjectClassQualifierConceptPreferredName5 = Image.
- OWNER\_REVIEWED = 1.

### Connections

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasTwoDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	

### *ImageAnnotationHasUriImageReferenceEntityStatement*

**Type:**      **Class**      **ImageAnnotationStatement**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      Created on 12/15/2011. Last modified on 1/2/2013.  
**GUID:**      {EECDA3C7-6944-4684-B8E1-31937AC87216}

An image annotation can have a URI reference that directs to the actual storage location of the image used in image annotation.

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = An image annotation can have a URI reference that directs to the actual storage location of the image used in image annotation..
- CADSR\_Inherited.objectUniqueId.Identifier.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueId.Identifier.OWNER\_REVIEWED = 1.
- CURATOR\_REVIEWED = 1.
- documentation = An image annotation can have a URI reference that directs to the actual storage location of the image used in image annotation..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..

- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C48294.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptCode3 = C42778.
- ObjectClassQualifierConceptCode4 = C101282.
- ObjectClassQualifierConceptCode5 = C44272.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptDefinition1 = Something referred to; the object of a reference..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition3 = A character string that can identify any kind of resource on the Internet, including images, text, video, audio and programs. The most common type of a URI is a URL..
- ObjectClassQualifierConceptDefinition4 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition5 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Reference Object.
- ObjectClassQualifierConceptPreferredName2 = Image.
- ObjectClassQualifierConceptPreferredName3 = Uniform Resource Identifier.
- ObjectClassQualifierConceptPreferredName4 = Have.
- ObjectClassQualifierConceptPreferredName5 = Annotation.
- ObjectClassQualifierConceptPreferredName6 = Image.

- OWNER REVIEWED = 1.

### ***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasUr iImageReferenceEntity Statement	Public ImageAnnotationState ment	

### ***ImageAnnotationIsComparedWithAnnotationOfAnnotationStatement***

**Type:**      **Class**    **AnnotationOfAnnotationStatement**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      *Created on 12/16/2011. Last modified on 1/2/2013.*  
**GUID:**      {0E895D9E-075F-4a34-8249-B738A4590D99}

An instance of ImageAnnotation is used to compared with another instance of AnnotationOfAnnotation. AIM users can further create CalculationEntityIsComparedWithCalculationEntityStatement to compare a calculation result from the subject AnnotationOfAnnotation instance with a calculation result from the object imageAnnotation.

### ***Custom Properties***

- isActive = False

### ***Tagged Values***

- CADSR\_Description = An instance of ImageAnnotation is used to compared with another instance of AnnotationOfAnnotation. .
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An instance of ImageAnnotation is used to compared with another instance of AnnotationOfAnnotation. .
- ObjectClassConceptCode = C49154.
- ObjectClassConceptDefinition = A verbal and/or written message that asserts, affirms, or declares something..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Statement.
- ObjectClassQualifierConceptCode1 = C44272.

- ObjectClassQualifierConceptCode2 = C44272.
- ObjectClassQualifierConceptCode3 = C62355.
- ObjectClassQualifierConceptCode4 = C49156.
- ObjectClassQualifierConceptCode5 = C44272.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptDefinition1 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition2 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition3 = Used to indicate the presence of something or someone..
- ObjectClassQualifierConceptDefinition4 = The examination of two or more people or things in order to detect similarities and differences..
- ObjectClassQualifierConceptDefinition5 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Annotation.
- ObjectClassQualifierConceptPreferredName2 = Annotation.
- ObjectClassQualifierConceptPreferredName3 = With.
- ObjectClassQualifierConceptPreferredName4 = Comparison.
- ObjectClassQualifierConceptPreferredName5 = Annotation.
- ObjectClassQualifierConceptPreferredName6 = Image.
- OWNER\_REVIEWS = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImageAnnotationIsComparedWithAnnotationOfAnnotationStatement	Public AnnotationOfAnnotationStatement	

***ImageAnnotationIsComparedWithImageAnnotationStatement*****Type:**      **Class**    [AnnotationOfAnnotationStatement](#)**Status:**      Proposed. Version 1.0. Phase 1.0.**Package:**      AIM      **Keywords:****Detail:**      *Created on 12/15/2011. Last modified on 1/2/2013.***GUID:**      {B0F45D4A-8990-4b7a-9C5E-F60D38ED4058}

An instance of ImageAnnotation is used to compare with another instance of ImageAnnotation. AIM users can further create CalculationEntityIsComparedWithCalculationEntityStatement to compare a calculation result from the subject AnnotationOfAnnotation instance with a calculation result from the object imageAnnotation.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An instance of ImageAnnotation is used to compare with another instance of ImageAnnotation..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An instance of ImageAnnotation is used to compare with another instance of ImageAnnotation..
- ObjectClassConceptCode = C101135.
- ObjectClassConceptDefinition = A statement used to describe something found and to be addressed on an image or series of images. It describes a thing found, measured and graphically annotated on an image or images from the same series. It consists of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Image Annotation Statement.
- ObjectClassQualifierConceptCode1 = C62355.
- ObjectClassQualifierConceptCode2 = C49156.

- ObjectClassQualifierConceptCode3 = C44272.
- ObjectClassQualifierConceptCode4 = C48179.
- ObjectClassQualifierConceptDefinition1 = Used to indicate the presence of something or someone..
- ObjectClassQualifierConceptDefinition2 = The examination of two or more people or things in order to detect similarities and differences..
- ObjectClassQualifierConceptDefinition3 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition4 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptPreferredName1 = With.
- ObjectClassQualifierConceptPreferredName2 = Comparison.
- ObjectClassQualifierConceptPreferredName3 = Annotation.
- ObjectClassQualifierConceptPreferredName4 = Image.
- OWNER\_REVIEWED = 1.

### *Connections*

Connector	Source	Target	Notes
<u>Generalization</u> Source -> Destination	Public ImageAnnotationIsComparedWithImageAnnotationStatement	Public AnnotationOfAnnotationStatement	

### *ImageAnnotationStatement*

**Type:**      **Class**      **AnnotationStatement**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      Created on 12/15/2011. Last modified on 11/21/2012.  
**GUID:**      {37A05499-9D47-4845-A456-7D4EE67364AF}

It represents a general concept about a statement used to describe something found and to be addressed on an image or the same thing on images in a series. A statement consists of a subject, predicate and object.

This class has AIM statements that can only be applied to ImageAnnotation.

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = This class has AIM statements that can only be applied to ImageAnnotation..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = This class has AIM statements that can only be applied to ImageAnnotation..
- ObjectClassConceptCode = C101135.
- ObjectClassConceptDefinition = A statement used to describe something found and to be addressed on an image or series of images. It describes a thing found, measured and graphically annotated on an image or images from the same series. It consists of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Image Annotation Statement.
- OWNER REVIEWED = 1.

### Connections

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasImagingPhysicalEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasDicomSegmentationEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasThreeDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationStatement	Public AnnotationStatement	
<b>Generalization</b>	Public	Public	

<b>Connector</b>	<b>Source</b>	<b>Target</b>	<b>Notes</b>
Source -> Destination	ImageAnnotationHasDicomImageReferenceEntityStatement	ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasTimePointLesionObservationEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public DicomImageReferenceEntityHasCalculationEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImagingObservationEntityIsIdentifiedByThreeDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasCalculationEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasUriImageReferenceEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public DicomSegmentationEntityHasImagingObservationEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImagingPhysicalEntityHasTwoDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public UriImageReferenceEntityHasImagingObservationEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImagingPhysicalEntityHasThreeDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public TimePointLesionObservationEntityHasImage	Public ImageAnnotationStatement	

<b>Connector</b>	<b>Source</b>	<b>Target</b>	<b>Notes</b>
	gPhysicalEntityStatement		
<b>Generalization</b> Source -> Destination	Public TwoDimensionGeometricShapeEntityExcludes TwoDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public GeneralLesionObservationEntityHasImagingPhysicalEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasChildImageAnnotationStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasImagingObservationEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasTextAnnotationEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public DicomImageReferenceEntityHasImagingPhysicalEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public UriImageReferenceEntityHasCalculationEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasInferenceEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public TwoDimensionGeometricShapeEntityIsComprisedOfTwoDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasGeneralLesionObservationEntityStatement	Public ImageAnnotationStatement	

<b>Connector</b>	<b>Source</b>	<b>Target</b>	<b>Notes</b>
<b>Generalization</b> Source -> Destination	Public ImagingObservationEntityIsIdentifiedByTextAnnotationEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public DicomImageReferenceEntityHasImagingObservationEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public UriImageReferenceEntityHasImagingPhysicalEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ThreeDimensionGeometricShapeEntityExcludesThreeDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImagingObservationEntityIsIdentifiedByTwoDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImagingPhysicalEntityHasTextAnnotationEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationHasTwoDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	
<b>Generalization</b> Source -> Destination	Public ThreeDimensionGeometricShapeEntityIsComprisedOfThreeDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	

## *ImageSeries*

Type: [Class](#)

Status: Proposed. Version 1.0. Phase 1.0.

Package: AIM

Keywords:

Detail: *Created on 12/16/2011. Last modified on 4/25/2012.*

**GUID:** {26FE9569-F33C-40f4-BEC1-F313EB15B2FD}

A series contains a set of images. Each series is associated with exactly one Study.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = A set of images. Typically, a series is made up of all of the slice generated from a scan. Each series is associated with exactly one Study..
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C25674.
- ObjectClassConceptDefinition = A group or succession of objects, substances, or events arranged in regular order in space or time, connected by a like relation, or forming a kind of chain..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Series.
- ObjectClassQualifierConceptCode1 = C48179.
- ObjectClassQualifierConceptDefinition1 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Image.
- OWNER REVIEWED = 1.

#### Connections

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private imageStudy ImageStudy	Private imageSeries ImageSeries	
<b>Association</b> Bi-Directional	Private imageSeries ImageSeries	Private imageCollection Image	

#### Attributes

Attribute	Notes	Constraints and tags

Attribute	Notes	Constraints and tags
<b>instanceUid II</b> Private	Unique identifier of a study series.	<p><i>Default:</i></p> <p>[CADSR_Description = Unique identifier of a study series.]  [CADSR_VD_ID = 2803193]  [CADSR_VD_VERSION = 1.0]  [CURATOR REVIEWED = 1]  [description = Unique identifier of a study series.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C70663]  [PropertyConceptDefinition = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, or]  [PropertyConceptDefinition_2 = r body of data.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Unique Identifier]  [PropertyQualifierConceptCode1 = C48364]  [PropertyQualifierConceptDefinition1 = An occurrence of something.]  [PropertyQualifierConceptDefinitionSource1 = NCI]  [PropertyQualifierConceptPreferredName1 = Instance]</p>
<b>modality CD</b> Private	Modality is the equipment used to acquire images of subjects or things, such as human and animal bodies. It is also used to reference other types of DICOM objects created by imaging modality or software program e.g. presentation state, SR document, radiotherapy objects, waveform, eModality is the equipment used to acquire images of subjects or things, such as human and animal bodies. It is also used to reference other types of DICOM objects created by imaging modality or software program e.g. presentation state, SR document, radiotherapy objectsncapsulated document, etc.	<p><i>Default:</i></p> <p>[CADSR_Description = Modality is the equipment used to acquire images of subjects or things, such as human and animal bodies. It is also used to reference other types of DICOM objects.]  [CADSR_VD_ID = 2803170]  [CADSR_VD_VERSION = 1.0]  [CURATOR REVIEWED = 1]  [description = Modality is the equipment used to acquire images of subjects or things, such as human and animal bodies. It is also used to reference other types of DICOM objects.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C41147]  [PropertyConceptDefinition = A</p>

Attribute	Notes	Constraints and tags
		specific manner, characteristic, pattern of application or the employment of, any therapeutic agent or method of treatment, especially involving the physical treatment of a condition. ] [PropertyConceptDefinitionSource = NCI ] [PropertyConceptPreferredName = Modality ]

**Operations**

Method	Notes	Parameters
<b>GetInstanceUid()</b> II Public	Unique identifier of a study series.	
<b>GetModality()</b> CD Public		
<b>SetInstanceUid()</b> void Public	Unique identifier of a study series.	<b>II</b> [in] newVal
<b>SetModality()</b> void Public		<b>CD</b> [in] newVal
<b>GetImageCollection()</b> Image[] Public		
<b>SetImageCollection()</b> void Public		<b>Image[]</b> [in] image

***ImageStudy*****Type:** Class**Status:** Proposed. Version 1.0. Phase 1.0.**Package:** AIM      **Keywords:****Detail:** Created on 12/16/2011. Last modified on 11/21/2012.**GUID:** {91BFAEA7-359A-4c91-9C9C-4404A0441E2D}

Defines the characteristics of an imaging study performed on an entity. A study in the AIM model has one series.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = Defines the characteristics of a medical study performed on a patient. A study is a collection of one or more series of medical images, presentation states, and/or DICOM SR documents that are logically related for the purpose of diagnosing a patient..

- CURATOR\_REVIEWS = 1.
- documentation = Defines the characteristics of a medical study performed on a patient. A study is a collection of one or more series of medical images, presentation states, and/or DICOM SR documents that are logically related for the purpose of diagnosing a patient..
- ObjectClassConceptCode = C63859.
- ObjectClassConceptDefinition = A radiographic technique used to evaluate a specific anatomic location for a specific purpose..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Image Study.
- OWNER\_REVIEWS = 1.

***Connections***

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private dicomImageReferenceEntity DicomImageReference Entity	Private imageStudy ImageStudy	
<b>Association</b> Bi-Directional	Private imageStudy ImageStudy	Private imageSeries ImageSeries	
<b>Association</b> Bi-Directional	Private imageStudy ImageStudy	Private referencedDicomObject Collection ReferencedDicomObject	

***Attributes***

Attribute	Notes	Constraints and tags
instanceUid II Private	Unique identifier for an occurrence of a medical imaging study.	<p><i>Default:</i></p> <p>[CADSR_Description = Unique identifier for an occurrence of a medical imaging study. ]  [CADSR_VD_ID = 2803193 ]  [CADSR_VD_VERSION = 1.0 ]  [CURATOR_REVIEWS = 1 ]  [description = Unique identifier for an occurrence of a medical imaging study. ]  [OWNER_REVIEWS = 1 ]  [PropertyConceptCode = C25364 ]  [PropertyConceptDefinition = One]</p>

Attribute	Notes	Constraints and tags
		<p>or more characters used to identify, name, or characterize the nature, properties, or contents of a thing. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Identifier ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C45282 ]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C48364 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = The single one of its kind. ]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = An occurrence of something. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Unique ]</p> <p>[<u>PropertyQualifierConceptPreferredName2</u> = Instance ]</p>
<b>startDate</b> TS Private	Date an imaging study started.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = Date an imaging study started. ]</p> <p>[<u>CADSR_VD_ID</u> = 2803209 ]</p> <p>[<u>CADSR_VD_VERSION</u> = 1.0 ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = Date an imaging study started. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C25164 ]</p> <p>[<u>PropertyConceptDefinition</u> = The particular day, month and year an event has happened or will happen. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Date ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C25431 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = Have a beginning, in a temporal, spatial, or evaluative sense; the point in space or time where something begins. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Begin ]</p>

Attribute	Notes	Constraints and tags
<b>startTime</b> TS Private	Time in HR(24):mm an imaging study started.	<p><i>Default:</i></p> <p>[CADSR_Description = Time in HR(24):mm an imaging study started.]  [CADSR_VD_ID = 2803209]  [CADSR_VD_VERSION = 1.0]  [CURATOR REVIEWED = 1]  [description = Time in HR(24):mm an imaging study started.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C25207]  [PropertyConceptDefinition = The continuum of experience in which events pass from the future through the present to the past.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Time]  [PropertyQualifierConceptCode1 = C25431]  [PropertyQualifierConceptDefinition1 = Have a beginning, in a temporal, spatial, or evaluative sense; the point in space or time where something begins.]  [PropertyQualifierConceptDefinitionSource1 = NCI]  [PropertyQualifierConceptPreferredName1 = Begin]</p>
<b>procedureDescription</b> ST Private  [0..1]	It is information about the procedure being performed on a subject.	<p><i>Default:</i></p> <p>[CADSR_Description = It is information about the procedure being performed on a subject.]  [CURATOR REVIEWED = 1]  [description = It is information about the procedure being performed on a subject.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C25365]  [PropertyConceptDefinition = A written or verbal account, representation, statement, or explanation of something.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Description]  [PropertyQualifierConceptCode1 = C79751]  [PropertyQualifierConceptDefinition1 =]</p>

Attribute	Notes	Constraints and tags
		<u>n1</u> = Any stepwise set of actions. ] [ <u>PropertyQualifierConceptDefinitionSource1</u> = NCI ] [ <u>PropertyQualifierConceptPreferredName1</u> = Procedure ]

***Operations***

Method	Notes	Parameters
<b>GetStartDate()</b> TS Public	Date an imaging study started.	
<b>SetStartDate()</b> void Public	Date an imaging study started.	<b>TS</b> [in] newVal
<b>GetInstanceUid()</b> II Public	Unique identifier for an occurrence of a medical imaging study.	
<b>GetProcedureDescription()</b> ST Public	procedureDescription is information about the procedure being performed on a subject.	
<b>GetStartTime()</b> TS Public	Time in HR(24):mm an imaging study started.	
<b>SetInstanceUid()</b> void Public	Unique identifier for an occurrence of a medical imaging study.	<b>II</b> [in] newVal
<b>SetProcedureDescription()</b> void Public	procedureDescription is information about the procedure being performed on a subject.	<b>ST</b> [in] newVal
<b>SetStartTime()</b> void Public	Time in HR(24):mm an imaging study started.	<b>TS</b> [in] newVal
<b>GetImageSeries()</b> ImageSeries Public		
<b>SetImageSeries()</b> void Public		<b>ImageSeries</b> [in] imageSeries
<b>SetReferencedDicomObjectCollection()</b> void Public		<b>ReferenceDicomObject[]</b> [in] referenceDicomObject
<b>GetReferenceDicomObjectCollection()</b> ReferencedDicomObject[] Public		

*ImagingObservationEntityHasCalculationEntityStatement*

Type:      Class    AnnotationStatement

*Status:* Proposed. Version 1.0. Phase 1.0.  
*Package:* AIM      *Keywords:*  
*Detail:* Created on 12/16/2011. Last modified on 1/2/2013.  
*GUID:* {98DBE5C5-C20A-424b-BDE5-E0CD7E7F5F4E}

An image observation can have a calculation result associate with it.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = An image observation can have a calculation result associate with it..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CURATOR\_REVIEWED = 1.
- documentation = An image observation can have a calculation result associate with it..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C54125.
- ObjectClassQualifierConceptCode2 = C101282.
- ObjectClassQualifierConceptCode3 = C51070.
- ObjectClassQualifierConceptCode4 = C25598.
- ObjectClassQualifierConceptCode5 = C48179.
- ObjectClassQualifierConceptDefinition1 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinition2 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition3 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition4 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition5 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.

- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Calculation.
- ObjectClassQualifierConceptPreferredName2 = Have.
- ObjectClassQualifierConceptPreferredName3 = Entity.
- ObjectClassQualifierConceptPreferredName4 = Observation.
- ObjectClassQualifierConceptPreferredName5 = Image.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImagingObservationEntityHasCalculationEntityStatement	Public AnnotationStatement	

***ImagingObservationEntityIsFoundInImagingPhysicalEntityStatement***

**Type:**      Class    AnnotationStatement  
**Status:**     Proposed. Version 1.0. Phase 1.0.  
**Package:**    AIM      Keywords:  
**Detail:**      Created on 12/16/2011. Last modified on 1/2/2013.  
**GUID:**        {A06832F3-B536-4ea9-AAA0-9276BAEB38A3}

An image observation can be found in an imaging physical entity.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An image observation can be found in an imaging physical entity..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.

- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An image observation can be found in an imaging physical entity..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C25618.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptCode3 = C25626.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C25598.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptDefinition1 = Having substance or material existence; concerned with material things; of or pertaining to the body as distinguished from the mind or spirit..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition3 = Being or existing in a specified place or at the specified time..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Physical.
- ObjectClassQualifierConceptPreferredName2 = Image.

- ObjectClassQualifierConceptPreferredName3 = Present.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Observation.
- ObjectClassQualifierConceptPreferredName6 = Image.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImagingObservationEntityIsFoundInImagingPhysicalEntityStatement	Public AnnotationStatement	

***ImagingObservationEntityIsIdentifiedByTextAnnotationEntityStatement***

**Type:**      **Class**    **ImageAnnotationStatement**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      *Created on 12/16/2011. Last modified on 1/2/2013.*  
**GUID:**      {24AB5272-CE3B-461c-AF9E-B24CEB8D06FB}

An imaging observation can be identified by a text annotation.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An imaging observation can be identified by a text annotation..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CURATOR\_REVIEWED = 1.
- documentation = An imaging observation can be identified by a text annotation..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.

- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C44272.
- ObjectClassQualifierConceptCode2 = C25704.
- ObjectClassQualifierConceptCode3 = C25737.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C25598.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptDefinition1 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition2 = The words of something written..
- ObjectClassQualifierConceptDefinition3 = The procedure of having an identity established..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Annotation.
- ObjectClassQualifierConceptPreferredName2 = Text.
- ObjectClassQualifierConceptPreferredName3 = Identification.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Observation.
- ObjectClassQualifierConceptPreferredName6 = Image.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImagingObservationEntityIsIdentifiedByTextAnnotationEntityStatement	Public ImageAnnotationStatement	

*ImagingObservationEntityIsIdentifiedByThreeDimensionGeometricShapeEntityStatement*

Type:           **Class**    **ImageAnnotationStatement**

Status:          Proposed. Version 1.0. Phase 1.0.

Package:       AIM        **Keywords:**

Detail:          Created on 3/23/2012. Last modified on 1/2/2013.

GUID:           {4C12EEA8-520E-4489-9F09-292487E2E53F}

An instance of imaging observation entity may have one or more three-dimension graphical drawings associate with it. ImageObservationEntityHasThreeDimensionGeometricShapeEntityStatement represents a direct relationship between an instance of imaging observation entity and a markup. If you have two markups on an image, you will need to create two statements.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An imaging observation can be identified by a graphical drawing..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An imaging observation can be identified by a three dimension graphical drawing..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C101119.
- ObjectClassQualifierConceptCode2 = C18005.

- ObjectClassQualifierConceptCode3 = C25737.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C25598.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition2 = The property of being measured and described using three orthogonal directions..
- ObjectClassQualifierConceptDefinition3 = The procedure of having an identity established..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName2 = 3-Dimensional.
- ObjectClassQualifierConceptPreferredName3 = Identification.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Observation.
- ObjectClassQualifierConceptPreferredName6 = Image.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<u>Generalization</u>	Public	Public	

Connector	Source	Target	Notes
Source -> Destination	ImagingObservationEntityIsIdentifiedByThreeDimensionGeometricShapeEntityStatement	ImageAnnotationStatement	

### *ImagingObservationEntityIsIdentifiedByTwoDimensionGeometricShapeEntityStatement*

Type: **Class** [\*\*ImageAnnotationStatement\*\*](#)

Status: Proposed. Version 1.0. Phase 1.0.

Package: AIM

Keywords: *Created on 12/16/2011. Last modified on 1/2/2013.*

Detail: {153E6EF8-3BEA-4a20-97B4-A41A2D6FCFB4}

An instance of imaging observation entity may have one or more three-dimension graphical drawings associate with it. ImageObservationEntityHasThreeDimensionGeometricShapeEntityStatement represents a direct relationship between an instance of imaging observation entity and a markup. If you have two markups on an image, you will need to create two statements.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = An imaging observation can be identified by a graphical drawing..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An imaging observation can be identified by a graphical drawing..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C101119.
- ObjectClassQualifierConceptCode2 = C48282.
- ObjectClassQualifierConceptCode3 = C25737.
- ObjectClassQualifierConceptCode4 = C51070.

- ObjectClassQualifierConceptCode5 = C25598.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition2 = The property of being measured and described using two orthogonal directions..
- ObjectClassQualifierConceptDefinition3 = The procedure of having an identity established..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName2 = 2-Dimensional.
- ObjectClassQualifierConceptPreferredName3 = Identification.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Observation.
- ObjectClassQualifierConceptPreferredName6 = Image.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImagingObservationEnt ityIsIdentifiedByTwoDi mensionGeometricShap eEntityStatement	Public ImageAnnotationState ment	

***ImagingPhysicalEntityHasCalculationEntityStatement***

Type:	Class	AnnotationStatement
Status:	Proposed.	Version 1.0. Phase 1.0.
Package:	AIM	Keywords:
Detail:		Created on 12/16/2011. Last modified on 1/2/2013.
GUID:		{CB6ABF3A-6CA0-443a-A889-F1D71E593780}

An imaging physical entity can have a calculation result.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An imaging physical entity can have a calculation result..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C54125.
- ObjectClassQualifierConceptCode2 = C101282.
- ObjectClassQualifierConceptCode3 = C51070.
- ObjectClassQualifierConceptCode4 = C25618.
- ObjectClassQualifierConceptCode5 = C48179.
- ObjectClassQualifierConceptDefinition1 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinition2 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition3 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition4 = Having substance or material existence; concerned with material things; of or pertaining to the body as distinguished from the mind or spirit..

- ObjectClassQualifierConceptDefinition5 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Calculation.
- ObjectClassQualifierConceptPreferredName2 = Have.
- ObjectClassQualifierConceptPreferredName3 = Entity.
- ObjectClassQualifierConceptPreferredName4 = Physical.
- ObjectClassQualifierConceptPreferredName5 = Image.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImagingPhysicalEntity HasCalculationEntityStatement	Public AnnotationStatement	

***ImagingPhysicalEntityHasImagingObservationEntityStatement***

**Type:**      **Class**    **AnnotationStatement**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      *Created on 12/16/2011. Last modified on 1/2/2013.*  
**GUID:**      {7FCD719C-0633-438d-A45E-F27AFE9DAB4D}

An image physical entity can have an imaging observation.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An image physical entity can have an imaging observation..

- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C25598.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C25618.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptDefinition1 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = Having substance or material existence; concerned with material things; of or pertaining to the body as distinguished from the mind or spirit..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Observation.

- ObjectClassQualifierConceptPreferredName2 = Image.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Physical.
- ObjectClassQualifierConceptPreferredName6 = Image.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImagingPhysicalEntity HasImagingObservationEntityStatement	Public AnnotationStatement	

***ImagingPhysicalEntityHasTextAnnotationEntityStatement***

Type:           **Class**    **ImageAnnotationStatement**

Status:         Proposed. Version 1.0. Phase 1.0.

Package:       AIM      **Keywords:**

Detail:          Created on 12/16/2011. Last modified on 1/2/2013.

GUID:           {12BC184B-FDC0-4cb2-AB90-19A6E1C2EF6D}

An image physical entity can have a text annotation.

***Custom Properties***

- isActive = False

***Tagged Values***

- CADSR\_Description = An image physical entity can have a text annotation..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CURATOR\_REVIEWED = 1.
- documentation = An image physical entity can have a text annotation..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..

- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C44272.
- ObjectClassQualifierConceptCode2 = C25704.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C25618.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptDefinition1 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinition2 = The words of something written..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = Having substance or material existence; concerned with material things; of or pertaining to the body as distinguished from the mind or spirit..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Annotation.
- ObjectClassQualifierConceptPreferredName2 = Text.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Physical.
- ObjectClassQualifierConceptPreferredName6 = Image.

- OWNER\_REVIEWED = 1.

### ***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImagingPhysicalEntity HasTextAnnotationEntityStatement	Public ImageAnnotationStatement	

### ***ImagingPhysicalEntityHasThreeDimensionGeometricShapeEntityStatement***

Type:           **Class**     **ImageAnnotationStatement**

Status:         Proposed. Version 1.0. Phase 1.0.

Package:       AIM        **Keywords:**

Detail:          Created on 12/16/2011. Last modified on 1/2/2013.

GUID:           {FE06AAA5-B894-4ebf-A462-ACEEAF8A100C}

An instance of imaging physical entity may have one or more three-dimension graphical drawings associate with it. ImagingPhysicalEntityHasThreeDimensionGeometricShapeEntityStatement represents a direct relationship between an instance of imaging physical entity and a markup. If you have two markups on an image, you will need to create two statements.

### ***Custom Properties***

- isActive = False

### ***Tagged Values***

- CADSR\_Description = An image physical entity can have a graphical drawing..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CURATOR\_REVIEWED = 1.
- documentation = An image physical entity can have a graphical drawing..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.

- ObjectClassQualifierConceptCode1 = C101119.
- ObjectClassQualifierConceptCode2 = C18005.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C25618.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition2 = The property of being measured and described using three orthogonal directions..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = Having substance or material existence; concerned with material things; of or pertaining to the body as distinguished from the mind or spirit..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName2 = 3-Dimensional.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Physical.
- ObjectClassQualifierConceptPreferredName6 = Image.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ImagingPhysicalEntity HasThreeDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	

***ImagingPhysicalEntityHasTwoDimensionGeometricShapeEntityStatement*****Type:**      Class    **ImageAnnotationStatement****Status:**      Proposed. Version 1.0. Phase 1.0.**Package:**      AIM    **Keywords:****Detail:**      *Created on 3/25/2012. Last modified on 1/2/2013.***GUID:**      {BA8DF66A-1BD5-4d1f-9C7A-50F5510F0F8E}

An image physical entity can have a graphical drawing.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An image physical entity can have a graphical drawing..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An image physical entity can have a graphical drawing..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C101119.
- ObjectClassQualifierConceptCode2 = C48282.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C51070.

- ObjectClassQualifierConceptCode5 = C25618.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition2 = The property of being measured and described using two orthogonal directions..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = Having substance or material existence; concerned with material things; of or pertaining to the body as distinguished from the mind or spirit..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName2 = 2-Dimensional.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Physical.
- ObjectClassQualifierConceptPreferredName6 = Image.
- OWNER\_REVIEWED = 1.

### Connections

Connector	Source	Target	Notes
<u>Generalization</u> Source -> Destination	Public ImagingPhysicalEntity HasTwoDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	

Connector	Source	Target	Notes

## *LesionObservationEntity*

Type:           **Class**     **Entity**

Status:         Proposed. Version 1.0. Phase 1.0.

Package:       AIM        Keywords:

Detail:          Created on 9/21/2012. Last modified on 1/2/2013.

GUID:           {0D7C4448-CBB9-4ddb-96AE-277E060D7AD8}

The class is an abstract class stores observations made about lesions in both clinical trial and day-to-day clinical treatments.

For detail information: See DICOM Clinical Trials Results Reporting *Supplement (Working group 18)*

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = The class stores observations made about lesions in both clinical trial and day-to-day clinical treatments..
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = The class stores observations made about lesions in both clinical trial and day-to-day clinical treatments..
- ObjectClassConceptCode = C51070.
- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.
- ObjectClassQualifierConceptCode1 = C25598.
- ObjectClassQualifierConceptCode2 = C3824.
- ObjectClassQualifierConceptDefinition1 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition2 = A localized pathological or traumatic structural change, damage, deformity, or discontinuity of tissue, organ, or body part..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.

- ObjectClassQualifierConceptPreferredName1 = Observation.
- ObjectClassQualifierConceptPreferredName2 = Lesion.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public LesionObservationEntity	Public Entity	
<b>Generalization</b> Source -> Destination	Public GeneralLesionObservationEntity	Public LesionObservationEntity	
<b>Generalization</b> Source -> Destination	Public TimePointLesionObservationEntity	Public LesionObservationEntity	
<b>Association</b> Bi-Directional	Private lesionObservationEntity Collection LesionObservationEntity	Private annotationEntity AnnotationEntity	

***Attributes***

Attribute	Notes	Constraints and tags
<b>lesionUniqueIdentifier II</b> Private	A globally unique identifier for all instances of this particular combination of lesion, subject, and reader role.	<p><i>Default:</i></p> <p>[CADSR_Description = A globally unique identifier for all instances of this particular combination of lesion, subject, and reader role. ]  [CURATOR_REVIEWED = 1 ]  [description = A globally unique identifier for all instances of this particular combination of lesion, subject, and reader role. ]  [OWNER_REVIEWED = 1 ]  [PropertyConceptCode = C25364 ]  [PropertyConceptDefinition = One or more characters used to identify, name, or characterize the nature, properties, or contents of a thing. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Identifier ]  [PropertyQualifierConceptCode1 =</p>

Attribute	Notes	Constraints and tags
		<p>C45282 ]  <u>[PropertyQualifierConceptCode2 = C45275 ]</u>  <u>[PropertyQualifierConceptDefinition1 = The single one of its kind. ]</u>  <u>[PropertyQualifierConceptDefinition2 = The act or process of following a person, animal, or object through space or time. ]</u>  <u>[PropertyQualifierConceptDefinitionSource1 = NCI ]</u>  <u>[PropertyQualifierConceptDefinitionSource2 = NCI ]</u>  <u>[PropertyQualifierConceptPreferredName1 = Unique ]</u>  <u>[PropertyQualifierConceptPreferredName2 = Tracking ]</u></p>
<b>isAdditionalObservation</b> BL Private  [0..1]	A coded boolean value required if the observation is additional to a parent entity that has previously been completed.	<p><i>Default:</i></p> <p><u>[CADSR_Description = A coded boolean value required if the observation is additional to a parent entity that has previously been completed. ]</u>  <u>[CURATOR REVIEWED = 1 ]</u>  <u>[description = A coded boolean value required if the observation is additional to a parent entity that has previously been completed. ]</u>  <u>[OWNER REVIEWED = 1 ]</u>  <u>[PropertyConceptCode = C45254 ]</u>  <u>[PropertyConceptDefinition = The type of an expression with two possible values, "true" and "false". Also, a variable of Boolean type or a function with Boolean arguments or result. The most common Boolean functions are AND, OR and NOT. ]</u>  <u>[PropertyConceptDefinitionSource = NCI ]</u>  <u>[PropertyConceptPreferredName = Boolean ]</u>  <u>[PropertyQualifierConceptCode1 = C25598 ]</u>  <u>[PropertyQualifierConceptCode2 = C25406 ]</u>  <u>[PropertyQualifierConceptDefinition1 = Watching something and taking note of what happens. ]</u>  <u>[PropertyQualifierConceptDefinition2 = Added; extra; further. ]</u>  <u>[PropertyQualifierConceptDefinitionSource = NCI ]</u></p>

Attribute	Notes	Constraints and tags
		<u>nSource1</u> = NCI ] [ <u>PropertyQualifierConceptDefinition</u> <u>nSource2</u> = NCI ] [ <u>PropertyQualifierConceptPreferred</u> <u>Name1</u> = Observation ] [ <u>PropertyQualifierConceptPreferred</u> <u>Name2</u> = Additional ]

**Operations**

Method	Notes	Parameters
<b>getLesionUniqueIdentifier()</b> II Public	A globally unique identifier for all instances of this particular combination of lesion, subject, and reader role.	
<b>setLesionUniqueIdentifier()</b> void Public	A globally unique identifier for all instances of this particular combination of lesion, subject, and reader role.	<b>II</b> [in] newVal
<b>GetIsAdditionalObservation()</b> BL Public	A coded boolean value required if the observation is additional to a parent entity that has previously been completed.	
<b>SetIsAdditionalObservation()</b> void Public	A coded boolean value required if the observation is additional to a parent entity that has previously been completed.	<b>BL</b> [in] newVal

**MarkupEntity**Type:           **Class**      **Entity**

Status:          Proposed. Version 1.0. Phase 1.0.

Package:        AIM      **Keywords:**

Detail:           Created on 12/5/2011. Last modified on 11/21/2012.

GUID:            {4925F45A-0D43-4c77-AC43-C98C56381D5A}

This abstract class represents graphical drawing and textual description that can be placed on an image.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = This abstract class represents graphical drawing and textual description that can be placed on an image..
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.

- description = This abstract class represents graphical drawing and textual description that can be placed on an image..
- ObjectClassConceptCode = C51070.
- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.
- ObjectClassQualifierConceptCode1 = C63615.
- ObjectClassQualifierConceptDefinition1 = A process for adding information to a document or image..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Markup.
- OWNER\_REVIEWED = 1.

### ***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public TextAnnotationEntity	Public MarkupEntity	
<b>Generalization</b> Source -> Destination	Public MarkupEntity	Public Entity	
<b>Generalization</b> Source -> Destination	Public GeometricShapeEntity	Public MarkupEntity	
<b>Association</b> Bi-Directional	Private imageAnnotation ImageAnnotation	Private markupEntityCollection MarkupEntity	

### ***ReferencedDicomObject***

Type: **Class**

Status: Proposed. Version 1.0. Phase 1.0.

Package: AIM      **Keywords:**

Detail: *Created on 12/21/2011. Last modified on 11/21/2012.*

GUID: {1D05602E-C0E9-43b8-AF1B-468BE784C3A4}

Referenced image(s) may have a collection of related DICOM objects created from the image(s), e.g. presentation state, SR document, radiotherapy objects, waveform, encapsulated document, etc. The class represents an instance of such related DICOM object.

For example, DICOM presentation state will be displayed in a device independent grayscale space or color space, and what graphical annotations and spatial and grayscale contrast transformations will be applied to the referenced

image pixel data.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = It defines how referenced image(s) will be displayed in a device independent grayscale space or color space, and what graphical annotations and spatial and grayscale contrast transformations will be applied to the referenced image pixel data..
- CURATOR REVIEWED = 1.
- documentation = It defines how referenced image(s) will be displayed in a device independent grayscale space or color space, and what graphical annotations and spatial and grayscale contrast transformations will be applied to the referenced image pixel data..
- ObjectClassConceptCode = C48294.
- ObjectClassConceptDefinition = Something referred to; the object of a reference..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Reference Object.
- ObjectClassQualifierConceptCode1 = C49059.
- ObjectClassQualifierConceptDefinition1 = A comprehensive set of standards for communications between medical imaging devices, including handling, storing and transmitting information in medical imaging. It includes a file format definition and a network communication protocol..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = DICOM.
- OWNER REVIEWED = 1.

#### Connections

Connector	Source	Target	Notes
<u>Association</u> Bi-Directional	Private imageStudy ImageStudy	Private referencedDicomObject Collection ReferencedDicomObjec t	

#### Attributes

Attribute	Notes	Constraints and tags
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Attribute	Notes	Constraints and tags
<b>modality</b> CD Private	Modality is the equipment used to acquire images of subjects or things, such as human and animal bodies. It is also used to reference other types of DICOM objects created by imaging modality or software program e.g. presentation state, SR document, radiotherapy objects, waveform, eModality is the equipment used to acquire images of subjects or things, such as human and animal bodies. It is also used to reference other types of DICOM objects created by imaging modality or software program e.g. presentation state, SR document, radiotherapy objectsncapsulated document, etc.	<p><i>Default:</i></p> <p>[CADSR_Description = Modality is the equipment used to acquire images of subjects or things, such as human and animal bodies. It is also used to reference other types of DICOM objects created by imaging modality or software program e.g. presentation state, SR document, radiot ]</p> <p>[CADSR_Description2 = herapy objects, waveform, eModality is the equipment used to acquire images of subjects or things, such as human and animal bodies. It is also used to reference other types of DICOM objects created by imaging modality or software program e.g. presentation ]</p> <p>[CADSR_Description3 = state, SR document, radiotherapy objectsncapsulated document, etc. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C41147 ]</p> <p>[PropertyConceptDefinition = A specific manner, characteristic, pattern of application or the employment of, any therapeutic agent or method of treatment, especially involving the physical treatment of a condition. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Modality ]</p>
<b>sopInstanceUid</b> II Private	Unique identifier for a Service-Object Pair (SOP) instance, as specified in a DICOM tag.	<p><i>Default:</i></p> <p>[CADSR_Description = Unique identifier for a Service-Object Pair (SOP) instance, as specified in a DICOM tag. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Unique identifier for a Service-Object Pair (SOP) instance, as specified in a DICOM tag. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C70663 ]</p> <p>[PropertyConceptDefinition = A set of characters used as a code that is unique in the context or the system ]</p>

Attribute	Notes	Constraints and tags
		<p>for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o ]</p> <p>[PropertyConceptDefinition_2 = r body of data. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Unique Identifier ]</p> <p>[PropertyQualifierConceptCode1 = C48364 ]</p> <p>[PropertyQualifierConceptCode2 = C63426 ]</p> <p>[PropertyQualifierConceptDefinition1 = An occurrence of something. ]</p> <p>[PropertyQualifierConceptDefinition2 = The information object and the service class are the two fundamental components of DICOM. Information objects define the core contents of medical imaging, and service classes define what to do with those contents. The service classes and information objec ]</p> <p>[PropertyQualifierConceptDefinition2_2 = ts are combined to form the functional units of DICOM. This combination is called a service-object pair. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Instance ]</p> <p>[PropertyQualifierConceptPreferredName2 = Service-Object Pair ]</p>

**Operations**

Method	Notes	Parameters
GetModality() CD Public	Modality is the equipment used to acquire images of subjects or things, such as human and animal bodies. It is also used to reference other types of DICOM objects created by imaging modality or software program e.g. presentation state, SR document, radiotherapy objects, waveform, eModality is the equipment used to acquire images of subjects or things, such as human and animal bodies. It is also	

Method	Notes	Parameters
	used to reference other types of DICOM objects created by imaging modality or software program e.g. presentation state, SR document, radiotherapy objectsncapsulated document, etc.	
<b>SetModality()</b> void Public	Modality is the equipment used to acquire images of subjects or things, such as human and animal bodies. It is also used to reference other types of DICOM objects created by imaging modality or software program e.g. presentation state, SR document, radiotherapy objects, waveform, eModality is the equipment used to acquire images of subjects or things, such as human and animal bodies. It is also used to reference other types of DICOM objects created by imaging modality or software program e.g. presentation state, SR document, radiotherapy objectsncapsulated document, etc.	<b>CD</b> [in] newVal
<b>GetSopInstanceId()</b> II Public	Unique identifier for a Service-Object Pair (SOP) instance, as specified in a DICOM tag.	
<b>SetSopInstanceId()</b> void Public	Unique identifier for a Service-Object Pair (SOP) instance, as specified in a DICOM tag.	<b>II</b> [in] newVal

## *SegmentationEntity*

**Type:**           **Class**     **Entity**  
**Status:**       Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM       **Keywords:**  
**Detail:**        Created on 12/21/2011. Last modified on 11/21/2012.  
**GUID:**        {B6EBD72C-90B2-4ff7-88DD-CD16FAC2DB60}

This is an abstract class representing a result of segmentation process where segmenting or partitioning digital image(s) in to a set of pixels. These pixels are stored in a separate file from original image(s).

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = This is an abstract class representing a result of segmentation process where segmenting or partitioning digital image(s) in to a set of pixels. These pixels are stored in a separate file from original image(s)..
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.

- ObjectClassConceptCode = C51070.
- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.
- ObjectClassQualifierConceptCode1 = C45312.
- ObjectClassQualifierConceptDefinition1 = One of the parts into which something naturally divides..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Segment.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private imageAnnotation ImageAnnotation	Private segmentationEntityCollection SegmentationEntity	
<b>Generalization</b> Source -> Destination	Public SegmentationEntity	Public Entity	
<b>Generalization</b> Source -> Destination	Public DicomSegmentationEntity	Public SegmentationEntity	

***TaskContextEntity*****Type:**      **Class**      **Entity****Status:**      Proposed. Version 1.0. Phase 1.0.**Package:**      AIM      **Keywords:****Detail:**      Created on 1/22/2012. Last modified on 11/21/2012.**GUID:**      {B9CFB5E4-B2E5-4e0d-B8FF-18A86392E1C1}

This class contains identifying and descriptive attributes of the reading session and the reading subtask that result in clinical environment or trial results. The class consists of the overall task and the specific subtask. A task represents a unit of overall work, e.g. "Read all of the available time points for the subjects". It may have one or more subtasks.

It can be used to capture planned (scheduled) and to record performed tasks.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = This class contains identifying and descriptive attributes of the reading session and the reading subtask that result in clinical environment or trial results. The class consists of the overall task and the specific subtask. A task represents a unit of ov.
  - CADSR\_Description2 = erall work, e.g. "Read all of the available time points for the subjects". It may have one or more subtasks.
- It can be used <font color="#ff0000">to capture planned (scheduled) and to record performed tasks.  
</font> .
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
  - CURATOR REVIEWED = 1.
  - descripton = This class contains identifying and descriptive attributes of the reading session and the reading task that result in clinical environment or trial results. A task represents a unit of overall work. It may have one or more subtasks..
  - ObjectClassConceptCode = C51070.
  - ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
  - ObjectClassConceptDefinitionSource = NCI.
  - ObjectClassConceptPreferredName = Entity.
  - ObjectClassQualifierConceptCode1 = C63325.
  - ObjectClassQualifierConceptCode2 = C101129.
  - ObjectClassQualifierConceptDefinition1 = The universe of discourse that surrounds a language unit and helps to determine its interpretation..
  - ObjectClassQualifierConceptDefinition2 = An assigned piece of work, usually with a time allotment..
  - ObjectClassQualifierConceptDefinitionSource1 = NCI.
  - ObjectClassQualifierConceptDefinitionSource2 = NCI.
  - ObjectClassQualifierConceptPreferredName1 = Context.
  - ObjectClassQualifierConceptPreferredName2 = Task.
  - OWNER REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Association</b> Source -> Destination	Private taskContextEntity TaskContextEntity	Private taskContextEntityCollection	

Connector	Source	Target	Notes
		TaskContextEntity	
<b>Association</b> Bi-Directional	Private annotationEntity AnnotationEntity	Private taskContextEntityCollection TaskContextEntity	
<b>Generalization</b> Source -> Destination	Public TaskContextEntity	Public Entity	

**Attributes**

Attribute	Notes	Constraints and tags
<b>worklistTaskUid</b> II Private	A unique identifier for each worklist task.	<p><i>Default:</i></p> <p>[CADDR_Description = A unique identifier for each worklist task.]  [CURATOR REVIEWED = 1]  [description = A unique identifier for each worklist task.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C70663]  [PropertyConceptDefinition = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o]  [PropertyConceptDefinition_2 = r body of data.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Unique Identifier]  [PropertyQualifierConceptCode1 = C101129]  [PropertyQualifierConceptCode2 = C101124]  [PropertyQualifierConceptDefinition1 = An assigned piece of work, usually with a time allotment.]  [PropertyQualifierConceptDefinition2 = A collection of activities or pieces of work that are generally assigned to an individual or machine to perform.]  [PropertyQualifierConceptDefinitionSource1 = NCI]  [PropertyQualifierConceptDefinitionSource2 = NCI]  [PropertyQualifierConceptPreferred</p>

Attribute	Notes	Constraints and tags
		<u>Name1</u> = Task ] [ <u>PropertyQualifierConceptPreferredName2</u> = Worklist ]
<b>worklistTaskName</b> ST Private	The name of the worklist task that was selected to initiate the reading session for the subject. E.g., this might be to read all of the available time points for the subject.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = The name of the worklist task that was selected to initiate the reading session for the subject. E.g., this might be to read all of the available time points for the subject.]  [<u>CURATOR REVIEWED</u> = 1 ]  [<u>description</u> = The name of the worklist task that was selected to initiate the reading session for the subject. E.g., this might be to read all of the available time points for the subject.]  [<u>OWNER REVIEWED</u> = 1 ]  [<u>PropertyConceptCode</u> = C42614 ]  [<u>PropertyConceptDefinition</u> = The words or language units by which a thing is known.]  [<u>PropertyConceptDefinitionSource</u> = NCI ]  [<u>PropertyConceptPreferredName</u> = Name ]  [<u>PropertyQualifierConceptCode1</u> = C101129 ]  [<u>PropertyQualifierConceptCode2</u> = C101124 ]  [<u>PropertyQualifierConceptDefinition1</u> = An assigned piece of work, usually with a time allotment.]  [<u>PropertyQualifierConceptDefinition2</u> = A collection of activities or pieces of work that are generally assigned to an individual or machine to perform.]  [<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]  [<u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]  [<u>PropertyQualifierConceptPreferredName1</u> = Task ]  [<u>PropertyQualifierConceptPreferredName2</u> = Worklist ]</p>

Attribute	Notes	Constraints and tags
<b>worklistTaskDescription</b> ST Private	A description of the task.	<p><i>Default:</i></p> <p>[CADSR_Description = A description of the task.]            [CURATOR REVIEWED = 1]            [description = A description of the task.]            [OWNER REVIEWED = 1]            [PropertyConceptCode = C25365]            [PropertyConceptDefinition = A written or verbal account, representation, statement, or explanation of something.]            [PropertyConceptDefinitionSource = NCI]            [PropertyConceptPreferredName = Description]            [PropertyQualifierConceptCode1 = C101129]            [PropertyQualifierConceptCode2 = C101124]            [PropertyQualifierConceptDefinition1 = An assigned piece of work, usually with a time allotment.]            [PropertyQualifierConceptDefinition2 = A collection of activities or pieces of work that are generally assigned to an individual or machine to perform.]            [PropertyQualifierConceptDefinitionSource1 = NCI]            [PropertyQualifierConceptDefinitionSource2 = NCI]            [PropertyQualifierConceptPreferredName1 = Task]            [PropertyQualifierConceptPreferredName2 = Worklist]         </p>
<b>worklistTaskCategory</b> CD Private	The category of a worklist task. E.g., whether or not a “sequential read” is “locked”, or a “substitute read”.	<p><i>Default:</i></p> <p>[CADSR_Description = The category of a worklist task. E.g., whether or not a “sequential read” is “locked”, or a “substitute read”.]            [CURATOR REVIEWED = 1]            [description = The category of a worklist task. E.g., whether or not a “sequential read” is “locked”, or a “substitute read”.]            [OWNER REVIEWED = 1]            [PropertyConceptCode = C25372]            [PropertyConceptDefinition = This term is used informally to mean a class of things.]         </p>

Attribute	Notes	Constraints and tags
		<p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Category ]</p> <p>[PropertyQualifierConceptCode1 = C101129 ]</p> <p>[PropertyQualifierConceptCode2 = C101124 ]</p> <p>[PropertyQualifierConceptDefinition1 = An assigned piece of work, usually with a time allotment. ]</p> <p>[PropertyQualifierConceptDefinition2 = A collection of activities or pieces of work that are generally assigned to an individual or machine to perform. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Task ]</p> <p>[PropertyQualifierConceptPreferredName2 = Worklist ]</p>
<b>worklistTaskLevel CD</b> Private	The level of the task with respect to adjudication of multiple task performers' work. E.g., perform initial task, comparison or repeat rejected task.	<p><i>Default:</i></p> <p>[CADSR_Description = The level of the task with respect to adjudication of multiple task performers' work. E.g., perform initial task, comparison or repeat rejected task.]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = The level of the task with respect to adjudication of multiple task performers' work. E.g., perform initial task, comparison or repeat rejected task.]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C25554 ]</p> <p>[PropertyConceptDefinition = A position on a scale measuring intensity, quality, or amount. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Level ]</p> <p>[PropertyQualifierConceptCode1 = C101129 ]</p> <p>[PropertyQualifierConceptCode2 = C101124 ]</p> <p>[PropertyQualifierConceptDefinition1 = An assigned piece of work,</p>

Attribute	Notes	Constraints and tags
		<p>usually with a time allotment. ]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = A collection of activities or pieces of work that are generally assigned to an individual or machine to perform. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Task ]</p> <p>[<u>PropertyQualifierConceptPreferredName2</u> = Worklist ]</p>
<b>worklistTaskType</b> CD Private	<p>The type of worklist task. E.g., the type of read, such as a “sequential read” or an “adjudication”.</p>	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = The type of worklist task. E.g., the type of read, such as a “sequential read” or an “adjudication”. ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = The type of worklist task. E.g., the type of read, such as a “sequential read” or an “adjudication”. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C25284 ]</p> <p>[<u>PropertyConceptDefinition</u> = Something distinguishable as an identifiable class based on common qualities. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Type ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C101129 ]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C101124 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = An assigned piece of work, usually with a time allotment. ]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = A collection of activities or pieces of work that are generally assigned to an individual or machine to perform. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Task ]</p>

Attribute	Notes	Constraints and tags
		<u>[PropertyQualifierConceptPreferredName2 = Worklist ]</u>
<b>worklistTaskRepeatType</b> CD Private [0..1]	The reason why a task (read) is to be repeated for a previously completed time point.	<p><i>Default:</i></p> <p><u>CADSR_Description</u> = The reason why a task (read) is to be repeated for a previously completed time point. ]  <u>CURATOR REVIEWED</u> = 1 ]  <u>description</u> = The reason why a task (read) is to be repeated for a previously completed time point. ]  <u>OWNER REVIEWED</u> = 1 ]  <u>PropertyConceptCode</u> = C25284 ]  <u>PropertyConceptDefinition</u> = Something distinguishable as an identifiable class based on common qualities. ]  <u>PropertyConceptDefinitionSource</u> = NCI ]  <u>PropertyConceptPreferredName</u> = Type ]  <u>PropertyQualifierConceptCode1</u> = C47886 ]  <u>PropertyQualifierConceptCode2</u> = C101129 ]  <u>PropertyQualifierConceptCode3</u> = C101124 ]  <u>PropertyQualifierConceptDefinition1</u> = Make or do or perform again. ]  <u>PropertyQualifierConceptDefinition2</u> = An assigned piece of work, usually with a time allotment. ]  <u>PropertyQualifierConceptDefinition3</u> = A collection of activities or pieces of work that are generally assigned to an individual or machine to perform. ]  <u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]  <u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]  <u>PropertyQualifierConceptDefinitionSource3</u> = NCI ]  <u>PropertyQualifierConceptPreferredName1</u> = Repeat ]  <u>PropertyQualifierConceptPreferredName2</u> = Task ] </p>

Attribute	Notes	Constraints and tags
		<u>[PropertyQualifierConceptPreferredName3 = Worklist ]</u>
<b>worklistTaskVariabilityType</b> CD Private [0..1]	The type of variability within or between performers that is being evaluated by a task.	<p><i>Default:</i></p> <p><u>[CADSR_Description</u> = The type of variability within or between performers that is being evaluated by a task. ]  <u>[CURATOR_REVIEWED</u> = 1 ]  <u>[description</u> = The type of variability within or between performers that is being evaluated by a task. ]  <u>[OWNER_REVIEWED</u> = 1 ]  <u>[PropertyConceptCode</u> = C25284 ]  <u>[PropertyConceptDefinition</u> = Something distinguishable as an identifiable class based on common qualities. ]  <u>[PropertyConceptDefinitionSource</u> = NCI ]  <u>[PropertyConceptPreferredName</u> = Type ]  <u>[PropertyQualifierConceptCode1</u> = C25713 ]  <u>[PropertyQualifierConceptCode2</u> = C101129 ]  <u>[PropertyQualifierConceptCode3</u> = C101124 ]  <u>[PropertyQualifierConceptDefinition1</u> = An alteration or difference from a norm or standard. ]  <u>[PropertyQualifierConceptDefinition2</u> = An assigned piece of work, usually with a time allotment. ]  <u>[PropertyQualifierConceptDefinition3</u> = A collection of activities or pieces of work that are generally assigned to an individual or machine to perform. ]  <u>[PropertyQualifierConceptDefinitionSource1</u> = NCI ]  <u>[PropertyQualifierConceptDefinitionSource2</u> = NCI ]  <u>[PropertyQualifierConceptDefinitionSource3</u> = NCI ]  <u>[PropertyQualifierConceptPreferredName1</u> = Variation ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyQualifierConceptPreferred Name2 = Task ]</p> <p>[PropertyQualifierConceptPreferred Name3 = Worklist ]</p>
<b>worklistTaskVersion</b> ST Private	The version of the task identified by the Worklist Task UID. For example, if the content of a task (request) is edited after it is created but before it is performed.	<p><i>Default:</i></p> <p>[CADSR_Description = The version of the task identified by the Worklist Task UID. For example, if the content of a task (request) is edited after it is created but before it is performed. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = The version of the task identified by the Worklist Task UID. For example, if the content of a task (request) is edited after it is created but before it is performed. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C25714 ]</p> <p>[PropertyConceptDefinition = A form or variant of a type or original; one of a sequence of copies of a program, each incorporating new modifications. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Version ]</p> <p>[PropertyQualifierConceptCode1 = C101129 ]</p> <p>[PropertyQualifierConceptCode2 = C101124 ]</p> <p>[PropertyQualifierConceptDefinition1 = An assigned piece of work, usually with a time allotment. ]</p> <p>[PropertyQualifierConceptDefinition2 = A collection of activities or pieces of work that are generally assigned to an individual or machine to perform. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Task ]</p> <p>[PropertyQualifierConceptPreferredName2 = Worklist ]</p>

Attribute	Notes	Constraints and tags
<b>worklistSubtaskUid</b> II Private	A unique identifier for each worklist sub-task.	<p><i>Default:</i></p> <p>[CADSR_Description = A unique identifier for each worklist sub-task.]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = A unique identifier for each worklist sub-task.]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C70663 ]</p> <p>[PropertyConceptDefinition = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o ]</p> <p>[PropertyConceptDefinition_2 = r body of data.]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Unique Identifier ]</p> <p>[PropertyQualifierConceptCode1 = C101129 ]</p> <p>[PropertyQualifierConceptCode2 = C90504 ]</p> <p>[PropertyQualifierConceptCode3 = C101124 ]</p> <p>[PropertyQualifierConceptDefinition1 = An assigned piece of work, usually with a time allotment.]</p> <p>[PropertyQualifierConceptDefinition2 = Lower in rank or importance, or dependent on something else.]</p> <p>[PropertyQualifierConceptDefinition3 = A collection of activities or pieces of work that are generally assigned to an individual or machine to perform.]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource3 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Task ]</p> <p>[PropertyQualifierConceptPreferredName2 = Subordinate ]</p> <p>[PropertyQualifierConceptPreferredName3 = Worklist ]</p>

Attribute	Notes	Constraints and tags
<b>worklistSubtaskName</b> ST Private	The name of the worklist sub-task within the worklist task that was selected to initiate the reading sub-task for the subject. E.g., this might be a sub-task to read the current time point in comparison with previous time points in a sequential read.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = The name of the worklist sub-task within the worklist task that was selected to initiate the reading sub-task for the subject. E.g., this might be a sub-task to read the current time point in comparison with previous time points in a sequential read.]</p> <p>[<u>CURATOR REVIEWED</u> = 1]</p> <p>[<u>description</u> = The name of the worklist sub-task within the worklist task that was selected to initiate the reading sub-task for the subject. E.g., this might be a sub-task to read the current time point in comparison with previous time points in a sequential read.]</p> <p>[<u>OWNER REVIEWED</u> = 1]</p> <p>[<u>PropertyConceptCode</u> = C42614]</p> <p>[<u>PropertyConceptDefinition</u> = The words or language units by which a thing is known.]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI]</p> <p>[<u>PropertyConceptPreferredName</u> = Name]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C101129]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C90504]</p> <p>[<u>PropertyQualifierConceptCode3</u> = C101124]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = An assigned piece of work, usually with a time allotment.]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = Lower in rank or importance, or dependent on something else.]</p> <p>[<u>PropertyQualifierConceptDefinition3</u> = A collection of activities or pieces of work that are generally assigned to an individual or machine to perform.]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2</u> = NCI]</p> <p>[<u>PropertyQualifierConceptDefinitionSource3</u> = NCI]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Task]</p> <p>[<u>PropertyQualifierConceptPreferredName2</u> = Task]</p>

Attribute	Notes	Constraints and tags
		<u>Name2</u> = Subordinate ] [ <u>PropertyQualifierConceptPreferredName3</u> = Worklist ]
<b>worklistSubtaskStartDat</b> <b>eTime TS</b> Private	The start date and time of the subtask. It does not change once started, even if the sub-task is closed as incomplete and re-opened one or more times before completion.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = The start date and time of the subtask. It does not change once started, even if the sub-task is closed as incomplete and re-opened one or more times before completion.]  [<u>CURATOR REVIEWED</u> = 1]  [<u>description</u> = The start date and time of the subtask. It does not change once started, even if the sub-task is closed as incomplete and re-opened one or more times before completion.]  [<u>OWNER REVIEWED</u> = 1]  [<u>PropertyConceptCode</u> = C37939]  [<u>PropertyConceptDefinition</u> = An expression of both date and time that an event has happened or will happen.]  [<u>PropertyConceptDefinitionSource</u> = NCI]  [<u>PropertyConceptPreferredName</u> = Date and Time]  [<u>PropertyQualifierConceptCode1</u> = C25431]  [<u>PropertyQualifierConceptCode2</u> = C101129]  [<u>PropertyQualifierConceptCode3</u> = C90504]  [<u>PropertyQualifierConceptCode4</u> = C101124]  [<u>PropertyQualifierConceptDefinition1</u> = Have a beginning, in a temporal, spatial, or evaluative sense; the point in space or time where something begins.]  [<u>PropertyQualifierConceptDefinition2</u> = An assigned piece of work, usually with a time allotment.]  [<u>PropertyQualifierConceptDefinition3</u> = Lower in rank or importance, or dependent on something else.]  [<u>PropertyQualifierConceptDefinition4</u> = A collection of activities or]</p>

Attribute	Notes	Constraints and tags
		<p>pieces of work that are generally assigned to an individual or machine to perform. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource3 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource4 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Begin ]</p> <p>[PropertyQualifierConceptPreferredName2 = Task ]</p> <p>[PropertyQualifierConceptPreferredName3 = Subordinate ]</p> <p>[PropertyQualifierConceptPreferredName4 = Worklist ]</p>
<b>worklistSubtaskClosedDate</b> Time TS Private	<p>The end date and time of the subtask. Whether completed or not; will be the same as Verification DateTime (0040,A030) if closed as complete and signed.</p>	<p><i>Default:</i></p> <p>[CADSR_Description] = The end date and time of the subtask.</p> <p>Whether completed or not; will be the same as Verification DateTime (0040,A030) if closed as complete and signed. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description] = The end date and time of the subtask. Whether completed or not; will be the same as Verification DateTime (0040,A030) if closed as complete and signed. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C37939 ]</p> <p>[PropertyConceptDefinition] = An expression of both date and time that an event has happened or will happen. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Date and Time ]</p> <p>[PropertyQualifierConceptCode1 = C49070 ]</p> <p>[PropertyQualifierConceptCode2 = C101129 ]</p> <p>[PropertyQualifierConceptCode3 = C90504 ]</p> <p>[PropertyQualifierConceptCode4 = C101124 ]</p> <p>[PropertyQualifierConceptDefinition]</p>

Attribute	Notes	Constraints and tags
		<p><u>n1</u> = Not affording passage or access; blocked against entry. ]</p> <p>[<a href="#">PropertyQualifierConceptDefinition</a></p> <p><u>n2</u> = An assigned piece of work, usually with a time allotment. ]</p> <p>[<a href="#">PropertyQualifierConceptDefinition</a></p> <p><u>n3</u> = Lower in rank or importance, or dependent on something else. ]</p> <p>[<a href="#">PropertyQualifierConceptDefinition</a></p> <p><u>n4</u> = A collection of activities or pieces of work that are generally assigned to an individual or machine to perform. ]</p> <p>[<a href="#">PropertyQualifierConceptDefinition</a></p> <p><u>nSource1</u> = NCI ]</p> <p>[<a href="#">PropertyQualifierConceptDefinition</a></p> <p><u>nSource2</u> = NCI ]</p> <p>[<a href="#">PropertyQualifierConceptDefinition</a></p> <p><u>nSource3</u> = NCI ]</p> <p>[<a href="#">PropertyQualifierConceptDefinition</a></p> <p><u>nSource4</u> = NCI ]</p> <p>[<a href="#">PropertyQualifierConceptPreferred</a></p> <p><u>Name1</u> = Closed ]</p> <p>[<a href="#">PropertyQualifierConceptPreferred</a></p> <p><u>Name2</u> = Task ]</p> <p>[<a href="#">PropertyQualifierConceptPreferred</a></p> <p><u>Name3</u> = Subordinate ]</p> <p>[<a href="#">PropertyQualifierConceptPreferred</a></p> <p><u>Name4</u> = Worklist ]</p>

***Operations***

Method	Notes	Parameters
<b>GetWorklistSubtaskClosedDateTime()</b> TS Public	The end date and time of the subtask. Whether completed or not; will be the same as Verification DateTime (0040,A030) if closed as complete and signed.	
<b>SetWorklistSubtaskClosedTDateTime()</b> void Public	The end date and time of the subtask. Whether completed or not; will be the same as Verification DateTime (0040,A030) if closed as complete and signed.	<b>TS</b> [in] newVal
<b>GetWorklistSubtaskStartTime()</b> TS Public	The start date and time of the subtask. It does not change once started, even if the sub-task is closed as incomplete and re-opened one or more times before completion.	
<b>SetWorklistSubtaskStartTime()</b> void Public	The start date and time of the subtask. It does not change once started, even if the sub-task is closed as incomplete and re-opened one or more times before completion.	<b>TS</b> [in] newVal
<b>GetWorklistSubtaskName</b>	The name of the worklist sub-task within the	

Method	Notes	Parameters
<b>e()</b> ST Public	worklist task that was selected to initiate the reading sub-task for the subject. E.g., this might be a sub-task to read the current time point in comparison with previous time points in a sequential read.	
<b>SetWorklistSubtaskName()</b> void Public	The name of the worklist sub-task within the worklist task that was selected to initiate the reading sub-task for the subject. E.g., this might be a sub-task to read the current time point in comparison with previous time points in a sequential read.	<b>ST</b> [in] newVal
<b>GetWorklistTaskCategory()</b> CD Public	The category of a worklist task. E.g., whether or not a “sequential read” is “locked”, or a “substitute read”.	
<b>SetWorklistTaskCategory()</b> void Public	The category of a worklist task. E.g., whether or not a “sequential read” is “locked”, or a “substitute read”.	<b>CD</b> [in] newVal
<b>GetWorklistTaskLevel()</b> CD Public		
<b>SetWorklistTaskLevel()</b> void Public		<b>CD</b> [in] newVal
<b>GetWorklistTaskName()</b> ST Public		
<b>SetWorklistTaskName()</b> void Public		<b>ST</b> [in] newVal
<b>GetWorklistTaskType()</b> CD Public	The type of worklist task. E.g., the type of read, such as a “sequential read” or an “adjudication”.	
<b>SetWorklistTaskType()</b> void Public	The type of worklist task. E.g., the type of read, such as a “sequential read” or an “adjudication”.	<b>CD</b> [in] newVal
<b>GetWorklistTaskRepeatType()</b> CD Public	The reason why a task (read) is to be repeated for a previously completed time point.	
<b>SetWorklistTaskRepeatType()</b> void Public	The reason why a task (read) is to be repeated for a previously completed time point.	<b>CD</b> [in] newVal
<b>GetWorklistTaskDescription()</b> ST Public	A description of the task.	
<b>GetWorklistTaskVariabilityType()</b> CD Public	The type of variability within or between performers that is being evaluated by a task.	
<b>SetWorklistTaskDescription()</b> void	A description of the task.	<b>ST</b> [in] newVal

Method	Notes	Parameters
Public		
<b>SetWorklistTaskVariabilityType()</b> void	The type of variability within or between performers that is being evaluated by a task.	<b>CD</b> [in] newVal
Public		
<b>GetWorklistTaskUid()</b> II	A unique identifier for each worklist task.	
Public		
<b>SetWorklistTaskUid()</b> void	A unique identifier for each worklist task.	<b>II</b> [in] newVal
Public		
<b>GetWorklistTaskVersion()</b> ST	The version of the task identified by the Worklist Task UID. For example, if the content of a task (request) is edited after it is created but before it is performed.	
Public		
<b>GetWorklistSubtaskUid()</b> II	A unique identifier for each worklist sub-task.	
Public		
<b>SetWorklistTaskVersion()</b> void	The version of the task identified by the Worklist Task UID. For example, if the content of a task (request) is edited after it is created but before it is performed.	<b>ST</b> [in] newVal
Public		
<b>SetWorklistSubtaskUid()</b> void	A unique identifier for each worklist sub-task.	<b>II</b> [in] newVal
Public		
<b>GetTaskContextEntityCollection()</b>	TaskContextEntity[]	
Public		
<b>SetTaskContextEntityCollection()</b> void		<b>TaskContextEntity[]</b> [in] taskContextEntityCollection
Public		

### *ThreeDimensionEllipse*

**Type:**           **Class**     [\*\*ThreeDimensionGeometricShapeEntity\*\*](#)  
**Status:**       Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM       **Keywords:**  
**Detail:**        Created on 3/15/2012. Last modified on 1/2/2013.  
**GUID:**        {E304BFBF-BB4F-4f72-9747-ACC2B6A4C754}

An ellipse defined by four (x,y,z) triplets, the first two triplets specifying the endpoints of the major axis and the second two triplets specifying the endpoints of the minor axis.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = An ellipse defined by four (x,y,z) triplets, the first two triplets specifying the endpoints of the major axis and the second two triplets specifying the endpoints of the minor axis..

- CADSR\_Inherited.comment.OWNER REVIEWED = 1.
- CADSR\_Inherited.description.OWNER REVIEWED = 1.
- CADSR\_Inherited.fiducialUID.OWNER REVIEWED = 1.
- CADSR\_Inherited.fiducialUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.frameOfReferenceUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.VD\_ID = 2803169.
- CADSR\_Inherited.includeFlag.VD\_VERSION = 1.0.
- CADSR\_Inherited.interpolationMethod.OWNER REVIEWED = 1.
- CADSR\_Inherited.label.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.VD\_ID = 2803207.
- CADSR\_Inherited.lineColor.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineOpacity.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineOpacity.VD\_ID = 2803207.
- CADSR\_Inherited.lineOpacity.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineStyle.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineStyle.VD\_ID = 2803207.
- CADSR\_Inherited.lineStyle.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineThickness.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineThickness.VD\_ID = 2803207.
- CADSR\_Inherited.lineThickness.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.questionIndex.VD\_ID = 2803195.
- CADSR\_Inherited.questionIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionTypeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.OWNER REVIEWED = 1.

- CADSR\_Inherited.shapeIdentifier.VD\_ID = 2803195.
- CADSR\_Inherited.shapeIdentifier.VD\_VERSION = 1.0.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An ellipse defined by four (x,y,z) triplets, the first two triplets specifying the endpoints of the major axis and the second two triplets specifying the endpoints of the minor axis..
- ObjectClassConceptCode = C64362.
- ObjectClassConceptDefinition = A closed plane curve resulting from the intersection of a circular cone and a plane cutting completely through it, especially a plane not parallel to the base..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Ellipse.
- ObjectClassQualifierConceptCode1 = C25483.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = 3-Dimensional.
- OWNER REVIEWED = 1.

### *Connections*

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ThreeDimensionEllipse	Public ThreeDimensionGeometricShapeEntity	

### *ThreeDimensionEllipsoid*

**Type:**      **Class**      **ThreeDimensionGeometricShapeEntity**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      *Created on 3/15/2012. Last modified on 1/2/2013.*  
**GUID:**      {E7ED735F-FE2F-4c77-B829-DDFD26589FA1}

A three-dimensional geometric surface whose plane sections are either ellipses or circles and contains three intersecting orthogonal axes, “a”, “b”, and “c”. The ellipsoid is defined by six (x,y,z) triplets, the first and second triplets specifying the endpoints of axis “a”, the third and fourth triplets specifying the endpoints of axis “b”, and the fifth and sixth triplets specifying the endpoints of axis “c”.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = A three-dimensional geometric surface whose plane sections are either ellipses or circles and contains three intersecting orthogonal axes, “a”, “b”, and “c”. The ellipsoid is defined by six (x,y,z) triplets, the first and second triplets specifying the en.
- CADSR\_Inherited.comment.OWNER REVIEWED = 1.
- CADSR\_Inherited.description.OWNER REVIEWED = 1.
- CADSR\_Inherited.fiducialUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.fiducialUID.OWNER REVIEWED = 1.
- CADSR\_Inherited.frameOfReferenceUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.VD\_ID = 2803169.
- CADSR\_Inherited.includeFlag.VD\_VERSION = 1.0.
- CADSR\_Inherited.interpolationMethod.OWNER REVIEWED = 1.
- CADSR\_Inherited.label.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.VD\_ID = 2803207.
- CADSR\_Inherited.lineColor.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineOpacity.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineOpacity.VD\_ID = 2803207.
- CADSR\_Inherited.lineOpacity.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineStyle.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineStyle.VD\_ID = 2803207.
- CADSR\_Inherited.lineStyle.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineThickness.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineThickness.VD\_ID = 2803207.
- CADSR\_Inherited.lineThickness.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionIndex.OWNER REVIEWED = 1.

- CADSR\_Inherited.questionIndex.VD\_ID = 2803195.
- CADSR\_Inherited.questionIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionTypeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.VD\_ID = 2803195.
- CADSR\_Inherited.shapeIdentifier.VD\_VERSION = 1.0.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = A three-dimensional geometric surface whose plane sections are either ellipses or circles and contains three intersecting orthogonal axes, “a”, “b”, and “c”. The ellipsoid is defined by six (x,y,z) triplets, the first and second triplets specifying the en.
- ObjectClassConceptCode = C64363.
- ObjectClassConceptDefinition = A surface whose plane sections are all ellipses or circles..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Ellipsoid.
- ObjectClassQualifierConceptCode1 = C25483.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = 3-Dimensional.
- OWNER REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ThreeDimensionEllipso id	Public ThreeDimensionGeome tricShapeEntity	

***ThreeDimensionGeometricShapeEntity***

Type:      **Class**      **GeometricShapeEntity**  
 Status:      Proposed. Version 1.0. Phase 1.0.

*Package:* AIM      *Keywords:*  
*Detail:* Created on 3/15/2012. Last modified on 11/21/2012.  
*GUID:* {E0B8F60E-D5E8-49b1-A29F-02FE55D33BCB}

This abstract class represents three dimension coordinates of a graphical drawing that can be placed on an image to identify a region of interest (ROI).

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = This abstract class represents three dimension coordinates of a graphical drawing that can be placed on an image to identify a region of interest (ROI)..
- CADSR\_Inherited.comment.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.description.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.includeFlag.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.includeFlag.VD\_ID = 2803169.
- CADSR\_Inherited.includeFlag.VD\_VERSION = 1.0.
- CADSR\_Inherited.interpolationMethod.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.label.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.lineColor.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.lineColor.VD\_ID = 2803207.
- CADSR\_Inherited.lineColor.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineOpacity.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.lineOpacity.VD\_ID = 2803207.
- CADSR\_Inherited.lineOpacity.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineStyle.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.lineStyle.VD\_ID = 2803207.
- CADSR\_Inherited.lineStyle.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineThickness.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.lineThickness.VD\_ID = 2803207.
- CADSR\_Inherited.lineThickness.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionIndex.OWNER\_REVIEWED = 1.

- CADSR\_Inherited.questionIndex.VD\_ID = 2803195.
- CADSR\_Inherited.questionIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionTypeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.VD\_ID = 2803195.
- CADSR\_Inherited.shapeIdentifier.VD\_VERSION = 1.0.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = This abstract class represents three dimension coordinates of a graphical drawing that can be placed on an image to identify a region of interest (ROI)..
- ObjectClassConceptCode = C51070.
- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.
- ObjectClassQualifierConceptCode1 = C101119.
- ObjectClassQualifierConceptCode2 = C25483.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition2 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName2 = 3-Dimensional.
- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ThreeDimensionMultiP	Public ThreeDimensionGeome	

Connector	Source	Target	Notes
	oint	tricShapeEntity	
<b>Generalization</b> Source -> Destination	Public ThreeDimensionEllipse	Public ThreeDimensionGeome tricShapeEntity	
<b>Generalization</b> Source -> Destination	Public ThreeDimensionEllipso id	Public ThreeDimensionGeome tricShapeEntity	
<b>Generalization</b> Source -> Destination	Public ThreeDimensionPolylin e	Public ThreeDimensionGeome tricShapeEntity	
<b>Generalization</b> Source -> Destination	Public ThreeDimensionPolygo n	Public ThreeDimensionGeome tricShapeEntity	
<b>Generalization</b> Source -> Destination	Public ThreeDimensionGeome tricShapeEntity	Public GeometricShapeEntity	
<b>Association</b> Source -> Destination	Private threeDimensionShapeE ntity ThreeDimensionGeome tricShapeEntity	Private threeDimensionSpatial CoordinateCollection ThreeDimensionSpatial Coordinate	
<b>Generalization</b> Source -> Destination	Public ThreeDimensionPoint	Public ThreeDimensionGeome tricShapeEntity	

**Attributes**

Attribute	Notes	Constraints and tags
<b>frameOfReferenceUid II</b> Private [0..1]	Uniquely identifies the Frame of Reference within which the coordinates are defined. The Frame of Reference Information Entity identifies the coordinate system that conveys spatial and/or temporal information of composite instances in a series.	<i>Default:</i>  [CADSR_Description = Uniquely identifies the Frame of Reference within which the coordinates are defined. The Frame of Reference Information Entity identifies the coordinate system that conveys spatial and/or temporal information of composite instances in a series.] [CURATOR REVIEWED = 1] [description = Uniquely identifies the Frame of Reference within which the coordinates are defined. The Frame of Reference Information Entity identifies the coordinate system that conveys spatial and/or temporal information]

Attribute	Notes	Constraints and tags
		<p>of composite instances in a series. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C70663 ]</p> <p>[<u>PropertyConceptDefinition</u> = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o ]</p> <p>[<u>PropertyConceptDefinition_2</u> = r body of data. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Unique Identifier ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C48360 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = A set of ideas, as of philosophical or religious doctrine, in terms of which other ideas are interpreted or assigned meaning; a system that uses coordinates to establish position. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Frame of Reference ]</p>
<b>fiducialUid II</b> Private  [0..1]	<p>The globally unique identifier for this fiducial item.</p> <p>A fiducial is some unique feature or landmark suitable as a spatial reference or correlation between similar objects. The fiducial may contribute to the definition of the origin and orientation of a chosen coordinate system.</p> <p>Identifying fiducials in different data sets is a common means to establish the spatial relationship between similar objects.</p> <p>Note: The fiducial UID can be used to associate this set of graphics with other Content Items.</p>	<p><i>Default:</i></p> <p>[<u>CADSR Description</u> = The globally unique identifier for this fiducial item. A fiducial is some unique feature or landmark suitable as a spatial reference or correlation between similar objects. ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = The globally unique identifier for this fiducial item. A fiducial is some unique feature or landmark suitable as a spatial reference or correlation between similar objects. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C70663 ]</p> <p>[<u>PropertyConceptDefinition</u> = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) ]</p>

Attribute	Notes	Constraints and tags
		for an entity, person, thing, function, procedure, activity, variable, o ] [PropertyConceptDefinition_2 = r body of data. ] [PropertyConceptDefinitionSource = NCI ] [PropertyConceptPreferredName = Unique Identifier ] [PropertyQualifierConceptCode1 = C44467 ] [PropertyQualifierConceptDefinition1 = Used as a fixed standard of reference for comparison or measurement. ] [PropertyQualifierConceptDefinitionSource1 = NCI ] [PropertyQualifierConceptPreferredName1 = Fiducial ]

***Operations***

Method	Notes	Parameters
<b>GetFrameOfReferenceUid() II</b> Public	Uniquely identifies the Frame of Reference within which the coordinates are defined. The Frame of Reference Information Entity identifies the coordinate system that conveys spatial and/or temporal information of composite instances in a series.	
<b>SetFrameOfReferenceUid() void</b> Public	Uniquely identifies the Frame of Reference within which the coordinates are defined. The Frame of Reference Information Entity identifies the coordinate system that conveys spatial and/or temporal information of composite instances in a series.	<b>I</b> [in] newVal
<b>GetFiducialUid() II</b> Public	The globally unique identifier for this fiducial item.  A fiducial is some unique feature or landmark suitable as a spatial reference or correlation between similar objects. The fiducial may contribute to the definition of the origin and orientation of a chosen coordinate system. Identifying fiducials in different data sets is a common means to establish the spatial relationship between similar objects.  Note: The fiducial UID can be used to associate this set of graphics with other Content Items.	
<b>SetFiducialUid() void</b> Public	The globally unique identifier for this fiducial item.  A fiducial is some unique feature or landmark suitable as a spatial reference or correlation between similar objects. The fiducial may	<b>I</b> [in] newVal

Method	Notes	Parameters
	contribute to the definition of the origin and orientation of a chosen coordinate system. Identifying fiducials in different data sets is a common means to establish the spatial relationship between similar objects. Note: The fiducial UID can be used to associate this set of graphics with other Content Items.	
<b>GetThreeDimensionSpaia ICoordinateCollection()</b> ThreeDimensionSpaialCoo rdinate[] Public		
<b>SetThreeDimensionSpaia ICoordinateCollection()</b> void Public		<b>ThreeDimensionSpaialCoordinate</b> [] [in] threeDimensionSpaialCoordinate

*ThreeDimensionGeometricShapeEntityExcludesThreeDimensionGeometricShapeEntity Statement*

*Type:*           **Class**     **ImageAnnotationStatement**

*Status:*       Proposed. Version 1.0. Phase 1.0.

*Package:*      AIM       **Keywords:**

*Detail:*          *Created on 3/15/2012. Last modified on 1/2/2013.*

*GUID:*          {158076E1-977C-44e5-AA3F-37A0899E3EC8}

Two graphical drawings captured as ThreeDimensionGeometricShapeEntity instances have a direct relationship with other graphical drawings when these drawings are placed on the same physical entity or thing. Area in one shape excludes from the other shape.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = Two or more graphical drawings captured as ThreeDimensionGeometricShapeEntity instances have a direct relationship with other graphical drawings when these drawings are placed on the same physical entity or thing. .
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..

- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C101119.
- ObjectClassQualifierConceptCode2 = C18005.
- ObjectClassQualifierConceptCode3 = C82931.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C101119.
- ObjectClassQualifierConceptCode6 = C18005.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition2 = The property of being measured and described using three orthogonal directions..
- ObjectClassQualifierConceptDefinition3 = The deliberate act of omission..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition6 = The property of being measured and described using three orthogonal directions..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName2 = 3-Dimensional.
- ObjectClassQualifierConceptPreferredName3 = Exclusion.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Geometric Shape.

- ObjectClassQualifierConceptPreferredName6 = 3-Dimensional.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ThreeDimensionGeometricShapeEntityExclude sThreeDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	

***ThreeDimensionGeometricShapeEntityIsComprisedOfThreeDimensionGeometricShapeEntityStatement***

Type:           **Class**     **ImageAnnotationStatement**

Status:         Proposed. Version 1.0. Phase 1.0.

Package:       AIM        **Keywords:**

Detail:          *Created on 3/15/2012. Last modified on 1/2/2013.*

GUID:           {0C3082E3-CA47-4890-91F9-CB1EBDD87FE9}

Two or more graphical drawings captured as ThreeDimensionGeometricShapeEntity instances have a direct relationship with other graphical drawings when these drawings are placed on the same physical entity or thing.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = This abstract class represents three dimension coordinates of a graphical drawing that can be placed on an image to identify a region of interest (ROI)..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER\_REVIEWED = 1.
- CURATOR\_REVIEWED = 1.
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.

- ObjectClassQualifierConceptCode1 = C101119.
- ObjectClassQualifierConceptCode2 = C18005.
- ObjectClassQualifierConceptCode3 = C79873.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C101119.
- ObjectClassQualifierConceptCode6 = C18005.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition2 = The property of being measured and described using three orthogonal directions..
- ObjectClassQualifierConceptDefinition3 = Include or hold; have within or as a component..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition6 = The property of being measured and described using three orthogonal directions..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName2 = 3-Dimensional.
- ObjectClassQualifierConceptPreferredName3 = Contain.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName6 = 3-Dimensional.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ThreeDimensionGeometricShapeEntityIsComprisedOfThreeDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	

***ThreeDimensionMultiPoint*****Type:**      **Class**    **ThreeDimensionGeometricShapeEntity****Status:**      Proposed. Version 1.0. Phase 1.0.**Package:**      AIM    **Keywords:****Detail:**      *Created on 3/15/2012. Last modified on 11/21/2012.***GUID:**      {F116D893-9888-432b-81A2-818BE79A14A6}

Multiple locations each denoted by an (x,y,z) triplet; the points need not be coplanar.

***Custom Properties***

- isActive = False

***Tagged Values***

- CADSR\_Description = Multiple locations each denoted by an (x,y,z) triplet; the points need not be coplanar..
- CADSR\_Inherited.comment.OWNER REVIEWED = 1.
- CADSR\_Inherited.description.OWNER REVIEWED = 1.
- CADSR\_Inherited.fiducialUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.fiducialUID.OWNER REVIEWED = 1.
- CADSR\_Inherited.frameOfReferenceUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.VD\_ID = 2803169.
- CADSR\_Inherited.includeFlag.VD\_VERSION = 1.0.
- CADSR\_Inherited.interpolationMethod.OWNER REVIEWED = 1.
- CADSR\_Inherited.label.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.VD\_ID = 2803207.

- CADSR\_Inherited.lineColor.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineOpacity.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineOpacity.VD\_ID = 2803207.
- CADSR\_Inherited.lineOpacity.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineStyle.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineStyle.VD\_ID = 2803207.
- CADSR\_Inherited.lineStyle.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineThickness.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineThickness.VD\_ID = 2803207.
- CADSR\_Inherited.lineThickness.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.questionIndex.VD\_ID = 2803195.
- CADSR\_Inherited.questionIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionTypeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.VD\_ID = 2803195.
- CADSR\_Inherited.shapeIdentifier.VD\_VERSION = 1.0.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = Multiple locations each denoted by an (x,y,z) triplet; the points need not be coplanar..
- ObjectClassConceptCode = C70656.
- ObjectClassConceptDefinition = The precise location of something; a spatially limited location..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Point.
- ObjectClassQualifierConceptCode1 = C17648.
- ObjectClassQualifierConceptCode2 = C25483.
- ObjectClassQualifierConceptDefinition1 = Having, relating to, or consisting of more than one individual, element, part, or other component; manifold. (dictionary.com).

- ObjectClassQualifierConceptDefinition2 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Multiple.
- ObjectClassQualifierConceptPreferredName2 = 3-Dimensional.
- OWNER\_REVIEWED = 1.

#### *Connections*

Connector	Source	Target	Notes
<u>Generalization</u> Source -> Destination	Public ThreeDimensionMultiPoint	Public ThreeDimensionGeometricShapeEntity	

#### *ThreeDimensionPoint*

**Type:**      Class    **ThreeDimensionGeometricShapeEntity**  
**Status:**     Proposed. Version 1.0. Phase 1.0.  
**Package:**    AIM      Keywords:  
**Detail:**      *Created on 3/15/2012. Last modified on 11/21/2012.*  
**GUID:**        {4E50F065-95DF-4f96-950F-5F894643D9F8}

A single location denoted by a single (x,y,z) triplet.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = A single location denoted by a single (x,y,z) triplet..
- CADSR\_Inherited.comment.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.description.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.fiducialUID.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.fiducialUid.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.frameOfReferenceUid.OWNER\_REVIEWED = 1.

- CADSR\_Inherited.includeFlag.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.VD\_ID = 2803169.
- CADSR\_Inherited.includeFlag.VD\_VERSION = 1.0.
- CADSR\_Inherited.interpolationMethod.OWNER REVIEWED = 1.
- CADSR\_Inherited.label.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.VD\_ID = 2803207.
- CADSR\_Inherited.lineColor.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineOpacity.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineOpacity.VD\_ID = 2803207.
- CADSR\_Inherited.lineOpacity.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineStyle.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineStyle.VD\_ID = 2803207.
- CADSR\_Inherited.lineStyle.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineThickness.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineThickness.VD\_ID = 2803207.
- CADSR\_Inherited.lineThickness.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.questionIndex.VD\_ID = 2803195.
- CADSR\_Inherited.questionIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionTypeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.VD\_ID = 2803195.
- CADSR\_Inherited.shapeIdentifier.VD\_VERSION = 1.0.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = A single location denoted by a single (x,y,z) triplet..
- ObjectClassConceptCode = C70656.

- ObjectClassConceptDefinition = The precise location of something; a spatially limited location..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Point.
- ObjectClassQualifierConceptCode1 = C25483.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = 3-Dimensional.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ThreeDimensionPoint	Public ThreeDimensionGeometricShapeEntity	

***ThreeDimensionPolygon***

Type:           **Class**    **ThreeDimensionGeometricShapeEntity**  
 Status:       Proposed. Version 1.0. Phase 1.0.  
 Package:      AIM       **Keywords:**  
 Detail:        Created on 3/15/2012. Last modified on 1/2/2013.  
 GUID:          {83F2F986-8192-4b22-ABA2-E7F0CAD96020}

A series of connected line segments with ordered vertices denoted by (x,y,z) triplets, where the first and last vertices shall be the same forming a polygon; the points shall be coplanar.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = A series of connected line segments with ordered vertices denoted by (x,y,z) triplets, where the first and last vertices shall be the same forming a polygon; the points shall be coplanar..
- CADSR\_Inherited.comment.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.description.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.fiducialUID.OWNER\_REVIEWED = 1.

- CADSR\_Inherited.fiducialUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.frameOfReferenceUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.VD\_ID = 2803169.
- CADSR\_Inherited.includeFlag.VD\_VERSION = 1.0.
- CADSR\_Inherited.interpolationMethod.OWNER REVIEWED = 1.
- CADSR\_Inherited.label.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.VD\_ID = 2803207.
- CADSR\_Inherited.lineColor.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineOpacity.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineOpacity.VD\_ID = 2803207.
- CADSR\_Inherited.lineOpacity.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineStyle.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineStyle.VD\_ID = 2803207.
- CADSR\_Inherited.lineStyle.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineThickness.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineThickness.VD\_ID = 2803207.
- CADSR\_Inherited.lineThickness.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.questionIndex.VD\_ID = 2803195.
- CADSR\_Inherited.questionIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionTypeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.VD\_ID = 2803195.
- CADSR\_Inherited.shapeIdentifier.VD\_VERSION = 1.0.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.

- documentation = A series of connected line segments with ordered vertices denoted by (x,y,z) triplets, where the first and last vertices shall be the same forming a polygon; the points shall be coplanar..
- ObjectClassConceptCode = C73492.
- ObjectClassConceptDefinition = A closed plane figure bounded by straight sides..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Polygon.
- ObjectClassQualifierConceptCode1 = C25483.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = 3-Dimensional.
- OWNER\_REVIEWED = 1.

#### Connections

Connector	Source	Target	Notes
<u>Generalization</u> Source -> Destination	Public ThreeDimensionPolygo n	Public ThreeDimensionGeome tricShapeEntity	

#### ThreeDimensionPolyline

**Type:**      **Class**    [ThreeDimensionGeometricShapeEntity](#)  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      *Created on 3/15/2012. Last modified on 11/21/2012.*  
**GUID:**      {869C2D12-39D6-42ed-BE0D-921A5E2F285C}

A series of connected line segments with ordered vertices denoted by (x,y,z) triplets; the points need not be coplanar.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = A series of connected line segments with ordered vertices denoted by (x,y,z) triplets; the points need not be coplanar..
- CADSR\_Inherited.comment.OWNER\_REVIEWED = 1.

- CADSR\_Inherited.description.OWNER REVIEWED = 1.
- CADSR\_Inherited.fiducialUID.OWNER REVIEWED = 1.
- CADSR\_Inherited.fiducialUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.frameOfReferenceUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.VD\_ID = 2803169.
- CADSR\_Inherited.includeFlag.VD\_VERSION = 1.0.
- CADSR\_Inherited.interpolationMethod.OWNER REVIEWED = 1.
- CADSR\_Inherited.label.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.VD\_ID = 2803207.
- CADSR\_Inherited.lineColor.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineOpacity.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineOpacity.VD\_ID = 2803207.
- CADSR\_Inherited.lineOpacity.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineStyle.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineStyle.VD\_ID = 2803207.
- CADSR\_Inherited.lineStyle.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineThickness.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineThickness.VD\_ID = 2803207.
- CADSR\_Inherited.lineThickness.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.questionIndex.VD\_ID = 2803195.
- CADSR\_Inherited.questionIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionTypeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.VD\_ID = 2803195.

- CADSR\_Inherited.shapeIdentifier.VD\_VERSION = 1.0.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = A series of connected line segments with ordered vertices denoted by (x,y,z) triplets; the points need not be coplanar..
- ObjectClassConceptCode = C71604.
- ObjectClassConceptDefinition = A mark that is long relative to its width; a length (straight or curved) without breadth or thickness; the trace of a moving point..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Line.
- ObjectClassQualifierConceptCode1 = C17648.
- ObjectClassQualifierConceptCode2 = C25483.
- ObjectClassQualifierConceptDefinition1 = Having, relating to, or consisting of more than one individual, element, part, or other component; manifold. (dictionary.com).
- ObjectClassQualifierConceptDefinition2 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Multiple.
- ObjectClassQualifierConceptPreferredName2 = 3-Dimensional.
- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ThreeDimensionPolyline	Public ThreeDimensionGeometricShapeEntity	

***TimePointLesionObservationEntity*****Type:**      **Class**      **LesionObservationEntity****Status:**      Proposed. Version 1.0. Phase 1.0.**Package:**      AIM      **Keywords:****Detail:**      Created on 9/21/2012. Last modified on 1/2/2013.

**GUID:** {4A79487C-6DFB-4617-85EF-A30D4772E344}

This class contains observations made about lesions in day-to-day clinical interpretations and clinical trial results at a specific time point. It also includes “lesions” that are created for the purpose of calibrating scanned film or other secondary capture images.

For detail information: See DICOM Clinical Trials Results Reporting *Supplement (Working group 18)*

#### **Custom Properties**

- isActive = False

#### **Tagged Values**

- CADSR\_Description = This class contains observations made about lesions in day-to-day clinical interpretations and clinical trial results at a specific time point. It also includes “lesions” that are created for the purpose of calibrating scanned film or other secondary capt.
- CADSR\_Description2 = ure images.

For detail information: See DICOM Clinical Trials Results Reporting <i>Supplement (Working group 18)</i>.

- CADSR\_Inherited.isAdditionalObservation.OWNER REVIEWED = 1.
- CADSR\_Inherited.lesionUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C51070.
- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.
- ObjectClassQualifierConceptCode1 = C25598.
- ObjectClassQualifierConceptCode2 = C3824.
- ObjectClassQualifierConceptCode3 = C68568.
- ObjectClassQualifierConceptDefinition1 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition2 = A localized pathological or traumatic structural change, damage, deformity, or discontinuity of tissue, organ, or body part..
- ObjectClassQualifierConceptDefinition3 = A specific point in the time continuum, including those established relative to an event..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.

- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Observation.
- ObjectClassQualifierConceptPreferredName2 = Lesion.
- ObjectClassQualifierConceptPreferredName3 = Timepoint.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public TimePointLesionObservationEntity	Public LesionObservationEntity	

***Attributes***

Attribute	Notes	Constraints and tags
<b>calibration BL</b> Private	A coded boolean value for a lesion created for the purpose of calibrating scanned film or secondary capture images. Calibrations are managed as lesions to capture a UID, completion status and change reasons when recalibration occurs.	<p><i>Default:</i></p> <p>[CADSR_Description] = A coded boolean value for a lesion created for the purpose of calibrating scanned film or secondary capture images. Calibrations are managed as lesions to capture a UID, completion status and change reasons when recalibration occurs.  ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description] = A coded boolean value for a lesion created for the purpose of calibrating scanned film or secondary capture images. Calibrations are managed as lesions to capture a UID, completion status and change reasons when recalibration occurs. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C69187 ]</p> <p>[PropertyConceptDefinition] = The act of checking or adjusting (by comparison with a standard) the accuracy of a measuring instrument.  ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName =</p>

Attribute	Notes	Constraints and tags
<b>predecessorLesionTrackingUid II</b> Private [0..1]	UID of one or more lesions on a previous time point that have been split or merged at this time point. Shall be a single value referencing the parent lesion if a lesion has been split at this time point; shall be multiple values referencing all the lesions at the previous time point that have been merged. Predecessor relationship exists.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = UID of one or more lesions on a previous time point that have been split or merged at this time point. ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = UID of one or more lesions on a previous time point that have been split or merged at this time point. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C70663 ]</p> <p>[<u>PropertyConceptDefinition</u> = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o ]</p> <p>[<u>PropertyConceptDefinition_2</u> = r body of data. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Unique Identifier ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C45275 ]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C3824 ]</p> <p>[<u>PropertyQualifierConceptCode3</u> = C25629 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = The act or process of following a person, animal, or object through space or time. ]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = A localized pathological or traumatic structural change, damage, deformity, or discontinuity of tissue, organ, or body part. ]</p> <p>[<u>PropertyQualifierConceptDefinition3</u> = Earlier in time or order. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyQualifierConceptDefinitionSource2 = NCI ]  [PropertyQualifierConceptDefinitionSource3 = NCI ]  [PropertyQualifierConceptPreferredName1 = Tracking ]  [PropertyQualifierConceptPreferredName2 = Lesion ]  [PropertyQualifierConceptPreferredName3 = Prior ]</p>
<b>comment</b> ST Private [0..1]	Lesion comments at the time point level are optional, and there may only be one of them.	<p><i>Default:</i></p> <p>[CADDRS_Description = Lesion comments at the time point level are optional, and there may only be one of them.]  [CURATOR_REVIEWED = 1 ]  [description = Lesion comments at the time point level are optional, and there may only be one of them.]  [OWNER_REVIEWED = 1 ]  [PropertyConceptCode = C25393 ]  [PropertyConceptDefinition = A written explanation, observation or criticism added to textual material.]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Comment ]</p>
<b>therapeuticResponse</b> CD Private [0..1]	Therapeutic response of interventional outcome.  Required if EV (DD0022, 99SupNNN, "Time Point Baseline") of the enclosing time point content item is (R-00339,SRT, "No") and it is a non-target lesion. Or, if the modality of the image on which the lesion is defined is PET. Shall not be present otherwise.	<p><i>Default:</i></p> <p>[CADDRS_Description = Therapeutic response of interventional outcome.]  [CURATOR_REVIEWED = 1 ]  [description = Therapeutic response of interventional outcome.]  [OWNER_REVIEWED = 1 ]  [PropertyConceptCode = C50995 ]  [PropertyConceptDefinition = The pathologic and/or clinical changes that result from treatment. The changes may include eradication of detectable disease, stabilization of disease, or disease progression.]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Response]  [PropertyQualifierConceptCode1 = C25277 ]  [PropertyQualifierConceptDefinition</p>

Attribute	Notes	Constraints and tags
		<p><u>n1</u> = Relating to or involved in therapy. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Therapeutic ]</p>
<b>qualitativeAssessment</b> CD Private [0..1]	PET lesion qualitative assessment. May be present for certain types of PET protocols, for example. Required if “Calibration” is “No”. Shall not be present otherwise.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = PET lesion qualitative assessment. May be present for certain types of PET protocols, for example. ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = PET lesion qualitative assessment. May be present for certain types of PET protocols, for example. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C20989 ]</p> <p>[<u>PropertyConceptDefinition</u> = A systemic evaluation of the body and its functions using visual inspection, palpation, percussion and auscultation. The purpose is to determine the presence or absence of physical signs of disease or abnormality for an individual's health assessment. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Physical Examination ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C92722 ]</p> <p>[<u>PropertyQualifierConceptDefinitionn1</u> = A measurement expressed in words rather than numbers. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Qualitative ]</p>
<b>canEvaluateLesion</b> BL Private [0..1]	A required boolean value defaulting to no at baseline, which may represent missing images or calibration information. May be yes if there are measurements present or if there is no therapeutic assessment (never the case at baseline).	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = Ability to evaluate lesion from given images. Yes (R-0038D,SRT, “Yes”) or No (R-00339,SRT, “No”). ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = Ability to evaluate lesion from given images. Yes (R-0038D,SRT, “Yes”) or No</p>

Attribute	Notes	Constraints and tags
		<p>(R-00339,SRT, "No"). ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C3824 ]</p> <p>[<u>PropertyConceptDefinition</u> = A localized pathological or traumatic structural change, damage, deformity, or discontinuity of tissue, organ, or body part. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Lesion ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C25214 ]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C45254 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = Systematic, objective appraisal of the significance, effectiveness, and impact of activities or condition according to specified objectives and criteria. ]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = The type of an expression with two possible values, "true" and "false". Also, a variable of Boolean type or a function with Boolean arguments or result. The most common Boolean functions are AND, OR and NOT. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Evaluation ]</p> <p>[<u>PropertyQualifierConceptPreferredName2</u> = Boolean ]</p>
<b>reasonUnableToEvaluate</b> CD Private  [0..1]	Provides a coded reason for why the lesion cannot be evaluated.	<p><i>Default:</i></p> <p>[<u>CADSR Description</u> = Provides a coded reason for why the lesion cannot be evaluated. ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = Provides a coded reason for why the lesion cannot be evaluated. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C25214 ]</p> <p>[<u>PropertyConceptDefinition</u> = Systematic, objective appraisal of</p>

Attribute	Notes	Constraints and tags
		<p>the significance, effectiveness, and impact of activities or condition according to specified objectives and criteria. ]</p> <p>[<a href="#">PropertyConceptDefinitionSource</a> = NCI ]</p> <p>[<a href="#">PropertyConceptPreferredName</a> = Evaluation ]</p> <p>[<a href="#">PropertyQualifierConceptCode1</a> = C78209 ]</p> <p>[<a href="#">PropertyQualifierConceptCode2</a> = C25594 ]</p> <p>[<a href="#">PropertyQualifierConceptCode3</a> = C25638 ]</p> <p>[<a href="#">PropertyQualifierConceptDefinition1</a> = The quality of being able to perform; a quality that permits or facilitates achievement or accomplishment . ]</p> <p>[<a href="#">PropertyQualifierConceptDefinition2</a> = An operation in which a term denies or inverts the meaning of another term or construction. ]</p> <p>[<a href="#">PropertyQualifierConceptDefinition3</a> = An explanation of the cause of some phenomenon or action. ]</p> <p>[<a href="#">PropertyQualifierConceptDefinitionSource1</a> = NCI ]</p> <p>[<a href="#">PropertyQualifierConceptDefinitionSource2</a> = NCI ]</p> <p>[<a href="#">PropertyQualifierConceptDefinitionSource3</a> = NCI ]</p> <p>[<a href="#">PropertyQualifierConceptPreferredName1</a> = Ability ]</p> <p>[<a href="#">PropertyQualifierConceptPreferredName2</a> = Negation ]</p> <p>[<a href="#">PropertyQualifierConceptPreferredName3</a> = Reason ]</p>
<b>canMeasureLesion</b> BL Private  [0..1]	<p>A boolean value indicating whether a lesion can be measured.</p> <p>Required if “Time Point Baseline” of the enclosing time point content item is “No” and “Lesion Type” for the same Tracking Unique Identifier is NOT “Non-target lesion” and Row 11 EV(DD0043, 99SupNNN, “Unable to evaluate lesion”) is (R-00339,SRT, “No”) and “Qualitative Assessment” is absent and measurement object is “No”. Shall not be present otherwise.</p>	<p><i>Default:</i></p> <p>[<a href="#">CADSR_Description</a> = A boolean value indicating whether a lesion can be measured. ]</p> <p>[<a href="#">CURATOR REVIEWED</a> = 1 ]</p> <p>[<a href="#">description</a> = A boolean value indicating whether a lesion can be measured. ]</p> <p>[<a href="#">OWNER REVIEWED</a> = 1 ]</p> <p>[<a href="#">PropertyConceptCode</a> = C3824 ]</p> <p>[<a href="#">PropertyConceptDefinition</a> = A localized pathological or traumatic structural change, damage, deformity, or discontinuity of tissue,</p>

Attribute	Notes	Constraints and tags
		<p>organ, or body part. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Lesion ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C25209 ]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C45254 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = Annotation used to indicate the size or magnitude of something that was determined by comparison to a standard. ]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = The type of an expression with two possible values, "true" and "false". Also, a variable of Boolean type or a function with Boolean arguments or result. The most common Boolean functions are AND, OR and NOT. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Measurement ]</p> <p>[<u>PropertyQualifierConceptPreferredName2</u> = Boolean ]</p>
<b>reasonUnableToMeasure</b> CD Private  [0..1]	Reason for why the lesion cannot be measured.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = Reason for why the lesion cannot be measured. ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = Reason for why the lesion cannot be measured. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C25209 ]</p> <p>[<u>PropertyConceptDefinition</u> = Annotation used to indicate the size or magnitude of something that was determined by comparison to a standard. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Measurement ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C78209 ]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C25594 ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyQualifierConceptCode3 = C25638 ]</p> <p>[PropertyQualifierConceptDefinition1 = The quality of being able to perform; a quality that permits or facilitates achievement or accomplishment . ]</p> <p>[PropertyQualifierConceptDefinition2 = An operation in which a term denies or inverts the meaning of another term or construction. ]</p> <p>[PropertyQualifierConceptDefinition3 = An explanation of the cause of some phenomenon or action. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource3 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Ability ]</p> <p>[PropertyQualifierConceptPreferredName2 = Negation ]</p> <p>[PropertyQualifierConceptPreferredName3 = Reason ]</p>
<b>isUnequivocalProgression</b> BL Private  [0..1]	A oboolean value used to indicate unequivocal progression when measurement is required but unable to measure.	<p><i>Default:</i></p> <p>[CADSR_Description = A oboolean value used to indicate unequivocal progression when measurement is required but unable to measure. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = A oboolean value used to indicate unequivocal progression when measurement is required but unable to measure. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C17747 ]</p> <p>[PropertyConceptDefinition = The worsening of a disease over time. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Disease Progression ]</p> <p>[PropertyQualifierConceptCode1 = C86071 ]</p> <p>[PropertyQualifierConceptCode2 = C25594 ]</p> <p>[PropertyQualifierConceptCode3 = C45254 ]</p> <p>[PropertyQualifierConceptDefinition1 = Open to question. ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyQualifierConceptDefinition2 = An operation in which a term denies or inverts the meaning of another term or construction.]</p> <p>[PropertyQualifierConceptDefinition3 = The type of an expression with two possible values, "true" and "false". Also, a variable of Boolean type or a function with Boolean arguments or result. The most common Boolean functions are AND, OR and NOT.]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI]</p> <p>[PropertyQualifierConceptDefinitionSource3 = NCI]</p> <p>[PropertyQualifierConceptPreferredName1 = Equivocal]</p> <p>[PropertyQualifierConceptPreferredName2 = Negation]</p> <p>[PropertyQualifierConceptPreferredName3 = Boolean]</p>

**Operations**

Method	Notes	Parameters
<b>getLesionUniqueIdentifier()</b> II Public	A globally unique identifier for all instances of this particular combination of lesion, subject, and reader role.	
<b>setLesionUniqueIdentifier()</b> void Public	A globally unique identifier for all instances of this particular combination of lesion, subject, and reader role.	<b>II</b> [in] newVal
<b>GetCalibration()</b> BL Public	A coded boolean value for a lesion created for the purpose of calibrating scanned film or secondary capture images. Calibrations are managed as lesions to capture a UID, completion status and change reasons when recalibration occurs.	
<b>SetCalibration()</b> void Public	A coded boolean value for a lesion created for the purpose of calibrating scanned film or secondary capture images. Calibrations are managed as lesions to capture a UID, completion status and change reasons when recalibration occurs.	<b>BL</b> [in] newVal
<b>GetPredecessorLesionTrackingUid()</b> II Public	UID of one or more lesions on a previous time point that have been split or merged at this time point. Shall be a single value referencing the parent lesion if a lesion has been split at this	

Method	Notes	Parameters
	time point; shall be multiple values referencing all the lesions at the previous time point that have been merged. Predecessor relationship exists.	
<b>SetPredecessorLesionTrackingUid()</b> void Public	UID of one or more lesions on a previous time point that have been split or merged at this time point. Shall be a single value referencing the parent lesion if a lesion has been split at this time point; shall be multiple values referencing all the lesions at the previous time point that have been merged. Predecessor relationship exists.	<b>II</b> [in] newVal
<b>GetComment()</b> ST Public	Lesion comments at the time point level are optional, and there may only be one of them.	
<b>SetComment()</b> void Public	Lesion comments at the time point level are optional, and there may only be one of them.	<b>ST</b> [in] newVal
<b>GetTherapeuticResponse()</b> CD Public	Therapeutic response of interventional outcome. Required if EV (DD0022, 99SupNNN, "Time Point Baseline") of the enclosing time point content item is (R-00339,SRT, "No") and it is a non-target lesion. Or, if the modality of the image on which the lesion is defined is PET. Shall not be present otherwise.	
<b>SetTherapeuticResponse()</b> void Public	Therapeutic response of interventional outcome. Required if EV (DD0022, 99SupNNN, "Time Point Baseline") of the enclosing time point content item is (R-00339,SRT, "No") and it is a non-target lesion. Or, if the modality of the image on which the lesion is defined is PET. Shall not be present otherwise.	<b>CD</b> [in] newVal
<b>GetQualitativeAssessment()</b> CD Public	PET lesion qualitative assessment. May be present for certain types of PET protocols, for example. Required if "Calibration" is "No". Shall not be present otherwise.	
<b>SetQualitativeAssessment()</b> void Public	PET lesion qualitative assessment. May be present for certain types of PET protocols, for example. Required if "Calibration" is "No". Shall not be present otherwise.	<b>CD</b> [in] newVal
<b>GetCanEvaluateLesion()</b> BL Public	A required boolean value defaulting to no at baseline, which may represent missing images or calibration information. May be yes if there are measurements present or if there is no therapeutic assessment (never the case at	

<b>Method</b>	<b>Notes</b>	<b>Parameters</b>
	baseline).	
<b>SetCanEvaluateLesion()</b> void Public	A required boolean value defaulting to no at baseline, which may represent missing images or calibration information. May be yes if there are measurements present or if there is no therapeutic assessment (never the case at baseline).	<b>BL</b> [in] newVal
<b>GetReasonUnableToEvaluate()</b> CD Public	Provides a coded reason for why the lesion cannot be evaluated.	
<b>GetCanMeasureLesion()</b> BL Public	A boolean value indicating whether a lesion can be measured.  Required if “Time Point Baseline” of the enclosing time point content item is “No” and “Lesion Type” for the same Tracking Unique Identifier is NOT “Non-target lesion” and Row 11 EV(DD0043, 99SupNNN, “Unable to evaluate lesion”) is (R-00339,SRT, “No”) and “Qualitative Assessment” is absent and measurement object is “No”. Shall not be present otherwise.	
<b>SetCanMeasureLesion()</b> void Public	A boolean value indicating whether a lesion can be measured.  Required if “Time Point Baseline” of the enclosing time point content item is “No” and “Lesion Type” for the same Tracking Unique Identifier is NOT “Non-target lesion” and Row 11 EV(DD0043, 99SupNNN, “Unable to evaluate lesion”) is (R-00339,SRT, “No”) and “Qualitative Assessment” is absent and measurement object is “No”. Shall not be present otherwise.	<b>BL</b> [in] newVal
<b>SetReasonUnableToMeasure()</b> void Public	Reason for why the lesion cannot be measured.	<b>CD</b> [in] newVal
<b>GetIsUnequivocalProgression()</b> BL Public	A oboolean value used to indicate unequivocal progression when measurement is required but unable to measure.	
<b>SetIsUnequivocalProgression()</b> void Public	A oboolean value used to indicate unequivocal progression when measurement is required but unable to measure.	<b>BL</b> [in] newVal

### *TimePointLesionObservationEntityHasImagingPhysicalEntityStatement*

Type:           **Class**    [ImageAnnotationStatement](#)  
 Status:       Proposed. Version 1.0. Phase 1.0.

*Package:* AIM      *Keywords:*  
*Detail:* Created on 9/21/2012. Last modified on 1/2/2013.  
*GUID:* {8E0B8A96-4C27-4511-95A0-294ED4CA10B0}

The class is used to record a relationship between a timepoint lesion observation and imaging physical entity. Each lesion observation can only be directly related to one imaging physical entity.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = The class is used to record a relationship between a time point lesion observation and imaging physical entity. Each lesion observation can only be directly related to one imaging physical entity..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = The class is used to record a relationship between a time point lesion observation and imaging physical entity. Each lesion observation can only be directly related to one imaging physical entity..
- ObjectClassConceptCode = C49154.
- ObjectClassConceptDefinition = A verbal and/or written message that asserts, affirms, or declares something..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Statement.
- ObjectClassQualifierConceptCode1 = C51070.
- ObjectClassQualifierConceptCode2 = C25618.
- ObjectClassQualifierConceptCode3 = C48179.
- ObjectClassQualifierConceptCode4 = C101282.
- ObjectClassQualifierConceptCode5 = C51070.
- ObjectClassQualifierConceptCode6 = C25598.
- ObjectClassQualifierConceptCode7 = C3824.
- ObjectClassQualifierConceptCode8 = C68568.
- ObjectClassQualifierConceptDefinition1 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition2 = Having substance or material existence; concerned with

material things; of or pertaining to the body as distinguished from the mind or spirit..

- ObjectClassQualifierConceptDefinition3 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition4 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition5 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition6 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition7 = A localized pathological or traumatic structural change, damage, deformity, or discontinuity of tissue, organ, or body part..
- ObjectClassQualifierConceptDefinition8 = A specific point in the time continuum, including those established relative to an event..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptDefinitionSource7 = NCI.
- ObjectClassQualifierConceptDefinitionSource8 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Entity.
- ObjectClassQualifierConceptPreferredName2 = Physical.
- ObjectClassQualifierConceptPreferredName3 = Image.
- ObjectClassQualifierConceptPreferredName4 = Have.
- ObjectClassQualifierConceptPreferredName5 = Entity.
- ObjectClassQualifierConceptPreferredName6 = Observation.
- ObjectClassQualifierConceptPreferredName7 = Lesion.
- ObjectClassQualifierConceptPreferredName8 = Timepoint.
- OWNER\_REVIEWED = 1.

#### Connections

Connector	Source	Target	Notes
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Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public TimePointLesionObservationEntityHasImagingPhysicalEntityStatement	Public ImageAnnotationStatement	

### *TwoDimensionGeometricShapeEntity*

Type:           **Class**    GeometricShapeEntity

Status:         Proposed. Version 1.0. Phase 1.0.

Package:       AIM      Keywords:

Detail:          Created on 3/15/2012. Last modified on 11/21/2012.

GUID:           {F84AA70F-6C49-41ad-81E8-D9A402C6351C}

This abstract class represents three dimension coordinates of a graphical drawing that can be placed on an image to identify a region of interest (ROI).

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = This abstract class represents three dimension coordinates of a graphical drawing that can be placed on an image to identify a region of interest (ROI)..
- CADSR\_Inherited.comment.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.description.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.includeFlag.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.includeFlag.VD\_ID = 2803169.
- CADSR\_Inherited.includeFlag.VD\_VERSION = 1.0.
- CADSR\_Inherited.interpolationMethod.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.label.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.lineColor.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.lineColor.VD\_ID = 2803207.
- CADSR\_Inherited.lineColor.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineOpacity.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.lineOpacity.VD\_ID = 2803207.
- CADSR\_Inherited.lineOpacity.VD\_VERSION = 1.0.

- CADSR\_Inherited.lineStyle.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineStyle.VD\_ID = 2803207.
- CADSR\_Inherited.lineStyle.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineThickness.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineThickness.VD\_ID = 2803207.
- CADSR\_Inherited.lineThickness.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.questionIndex.VD\_ID = 2803195.
- CADSR\_Inherited.questionIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionTypeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.VD\_ID = 2803195.
- CADSR\_Inherited.shapeIdentifier.VD\_VERSION = 1.0.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = This abstract class represents three dimension coordinates of a graphical drawing that can be placed on an image to identify a region of interest (ROI)..
- ObjectClassConceptCode = C51070.
- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.
- ObjectClassQualifierConceptCode1 = C101119.
- ObjectClassQualifierConceptCode2 = C48282.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition2 = The property of being measured and described using two orthogonal directions..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.

- ObjectClassQualifierConceptPreferredName1 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName2 = 2-Dimensional.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Association</b> Source -> Destination	Private twoDimensionShapeEntity TwoDimensionGeometricShapeEntity	Private twoDimensionSpatialCoordinateCollection TwoDimensionSpatialCoordinate	
<b>Generalization</b> Source -> Destination	Public TwoDimensionPolyline	Public TwoDimensionGeometricShapeEntity	
<b>Generalization</b> Source -> Destination	Public TwoDimensionEllipse	Public TwoDimensionGeometricShapeEntity	
<b>Generalization</b> Source -> Destination	Public TwoDimensionGeometricShapeEntity	Public GeometricShapeEntity	
<b>Generalization</b> Source -> Destination	Public TwoDimensionCircle	Public TwoDimensionGeometricShapeEntity	
<b>Generalization</b> Source -> Destination	Public TwoDimensionPoint	Public TwoDimensionGeometricShapeEntity	
<b>Generalization</b> Source -> Destination	Public TwoDimensionMultiPoint	Public TwoDimensionGeometricShapeEntity	

***Attributes***

Attribute	Notes	Constraints and tags
<b>imageReferenceUid II</b> Private [0..1]	This attribute contains DICOM SOP Instance UID. It is a unique UID used to identify an image. SOP Instance UID is used to uniquely reference an image.	<i>Default:</i>  [CADDR_Description] = This attribute contains DICOM SOP Instance UID. It is a unique UID used to identify an image. ] [CURATOR REVIEWED = 1 ] [description] = This attribute contains DICOM SOP Instance

Attribute	Notes	Constraints and tags
		<p>UID. It is a unique UID used to identify an image. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C70663 ]</p> <p>[PropertyConceptDefinition = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, or body of data. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Unique Identifier ]</p> <p>[PropertyQualifierConceptCode1 = C48294 ]</p> <p>[PropertyQualifierConceptCode2 = C48179 ]</p> <p>[PropertyQualifierConceptDefinition1 = Something referred to; the object of a reference. ]</p> <p>[PropertyQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Reference Object ]</p> <p>[PropertyQualifierConceptPreferredName2 = Image ]</p>
<b>referencedFrameNumber</b> INT Private  [0..1]	Identifies the frame numbers within the Referenced SOP Instance to which the reference applies. The first frame shall be denoted as frame number 1. Or, the frame number of the frame that contains the image in the case of multi-frame images.	<p><i>Default:</i></p> <p>[CADSR_Description = Identifies the frame numbers within the Referenced SOP Instance to which the reference applies. The first frame shall be denoted as frame number 1. Or, the frame number of the frame that contains the image in the case of multi-frame images. ]</p> <p>[CADSR_VD_ID = 2803195 ]</p> <p>[CADSR_VD_VERSION = 1.0 ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Identifies the frame numbers within the Referenced SOP Instance to which the reference</p>

Attribute	Notes	Constraints and tags
		<p>applies. The first frame shall be denoted as frame number 1. Or, the frame number of the frame that contains the image in the case of multi-frame images. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C25337 ]</p> <p>[<u>PropertyConceptDefinition</u> = A numeral or string of numerals expressing value, quantity, or identification. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Number ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C49963 ]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C48294 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = A structure designed to support or contain an object. ]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = Something referred to; the object of a reference. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Frame Device Component ]</p> <p>[<u>PropertyQualifierConceptPreferredName2</u> = Reference Object ]</p>
<b>Uri ST</b> Private [0..1]	Uniform Resource Locator of the image, e.g., http://www.nic.gov, file:///home/nci/Missions.docx or file:///home/nci/JPEG.jpg.	<p><i>Default:</i></p> <p>[<u>CADSR Description</u> = Uniform Resource Locator of the image, e.g.,  http://www.nic.gov,  file:///home/nci/Missions.docx or  file:///home/nci/JPEG.jpg. ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = Uniform Resource Locator of the image, e.g.,  http://www.nic.gov,  file:///home/nci/Missions.docx or  file:///home/nci/JPEG.jpg. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C42778 ]</p> <p>[<u>PropertyConceptDefinition</u> = A character string that can identify any kind of resource on the Internet, including images, text, video, audio</p>

Attribute	Notes	Constraints and tags
		and programs. The most common type of a URI is a URL. ] [PropertyConceptDefinitionSource = NCI ] [PropertyConceptPreferredName = Uniform Resource Identifier ]

**Operations**

Method	Notes	Parameters
<b>GetTwoDimensionSpatialCoordinateCollection()</b> TwoDimensionSpatialCoordinate[] Public		
<b>SetTwoDimensionSpatialCoordinateCollection()</b> void Public		<b>TwoDimensionSpatialCoordinate</b> [] [in] twoDimensionSpatialCoordinate
<b>GetImageReferenceUid()</b> <b>II</b> Public	This attribute contains DICOM SOP Instance UID. It is a unique UID used to identify an image. SOP Instance UID is used to uniquely reference an image.	
<b>SetImageReferenceUid()</b> void Public	This attribute contains DICOM SOP Instance UID. It is a unique UID used to identify an image. SOP Instance UID is used to uniquely reference an image.	<b>II</b> [in] newVal
<b>GetReferencedFrameNumber()</b> INT Public	Identifies the frame numbers within the Referenced SOP Instance to which the reference applies. The first frame shall be denoted as frame number 1. Or, the frame number of the frame that contains the image in the case of multi-frame images.	
<b>SetReferencedFrameNumber()</b> void Public	Identifies the frame numbers within the Referenced SOP Instance to which the reference applies. The first frame shall be denoted as frame number 1. Or, the frame number of the frame that contains the image in the case of multi-frame images.	INT [in] newVal
<b>GetUri()</b> ST Public	Uniform Resource Locator of the image, e.g., http://www.nci.gov, file:///home/nci/Missions.docx or file:///home/nci/JPEG.jpg.	
<b>SetUri()</b> void Public	Uniform Resource Locator of the image, e.g., http://www.nci.gov, file:///home/nci/Missions.docx or file:///home/nci/JPEG.jpg.	<b>ST</b> [in] newVal

Method	Notes	Parameters

*TwoDimensionGeometricShapeEntityExcludesTwoDimensionGeometricShapeEntityStatement*

**Type:** [Class](#) [ImageAnnotationStatement](#)  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM [Keywords:](#)  
**Detail:** *Created on 12/16/2011. Last modified on 1/2/2013.*  
**GUID:** {AB464F8A-B0AC-4dad-9D21-03D8D9CEAC11}

A graphical drawing captured as GeometricShapeEntity can contain another graphical drawing that is used to subtract from the first graphical drawing. This statement is used, for example, in case of a donut drawing where the total area of the enclosed object is subtracted from the area of enclosing object.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = A graphical drawing captured as GeometricShapeEntity can contain another graphical drawing that is used to subtract from the first graphical drawing..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = A graphical drawing captured as GeometricShapeEntity can contain another graphical drawing that is used to subtract from the first graphical drawing..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C101119.
- ObjectClassQualifierConceptCode2 = C48282.
- ObjectClassQualifierConceptCode3 = C82931.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C101119.

- ObjectClassQualifierConceptCode6 = C48282.
- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition2 = The property of being measured and described using two orthogonal directions..
- ObjectClassQualifierConceptDefinition3 = The deliberate act of omission..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition6 = The property of being measured and described using two orthogonal directions..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName2 = 2-Dimensional.
- ObjectClassQualifierConceptPreferredName3 = Exclusion.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName6 = 2-Dimensional.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<u>Generalization</u> Source -> Destination	Public TwoDimensionGeometricShapeEntityExcludes TwoDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	

## *TwoDimensionGeometricShapeEntityIsComprisedOfTwoDimensionGeometricShapeEntityStatement*

Type:	Class	ImageAnnotationStatement
Status:	Proposed.	Version 1.0. Phase 1.0.
Package:	AIM	Keywords:
Detail:		Created on 12/16/2011. Last modified on 1/2/2013.
GUID:		{271737CF-13FB-4f44-A091-7420A393A3E6}

Two or more graphical drawings captured as GeometricShapeEntity instances have a direct relationship with other graphical drawings when these drawings are placed on the same physical entity or thing. A user draws two different drawings on the same lesion.

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = Two or more graphical drawings captured as GeometricShapeEntity instances have a direct relationship with other graphical drawings when these drawings are placed on the same physical entity or thing..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = Two or more graphical drawings captured as GeometricShapeEntity instances have a direct relationship with other graphical drawings when these drawings are placed on the same physical entity or thing..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C101119.
- ObjectClassQualifierConceptCode2 = C48282.
- ObjectClassQualifierConceptCode3 = C79873.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C101119.
- ObjectClassQualifierConceptCode6 = C48282.

- ObjectClassQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition2 = The property of being measured and described using two orthogonal directions..
- ObjectClassQualifierConceptDefinition3 = Include or hold; have within or as a component..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassQualifierConceptDefinition6 = The property of being measured and described using two orthogonal directions..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName2 = 2-Dimensional.
- ObjectClassQualifierConceptPreferredName3 = Contain.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Geometric Shape.
- ObjectClassQualifierConceptPreferredName6 = 2-Dimensional.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public TwoDimensionGeometricShapeEntityIsComprisedOfTwoDimensionGeometricShapeEntityStatement	Public ImageAnnotationStatement	

***UriImageReferenceEntityHasCalculationEntityStatement***

**Type:** Class **ImageAnnotationStatement**  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM **Keywords:**  
**Detail:** *Created on 12/16/2011. Last modified on 1/2/2013.*  
**GUID:** {3512E445-7685-4cd6-97EF-D6F7558674D2}

A URI image reference can have a calculation associated with it.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = A URI image reference can have a calculation associated with it..
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = A URI image reference can have a calculation associated with it..
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C54125.
- ObjectClassQualifierConceptCode2 = C101282.
- ObjectClassQualifierConceptCode3 = C51070.
- ObjectClassQualifierConceptCode4 = C48294.
- ObjectClassQualifierConceptCode5 = C48179.
- ObjectClassQualifierConceptCode6 = C42778.
- ObjectClassQualifierConceptDefinition1 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinition2 = Used to describe the possession, relationships, or the state of something or someone..

- ObjectClassQualifierConceptDefinition3 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition4 = Something referred to; the object of a reference..
- ObjectClassQualifierConceptDefinition5 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition6 = A character string that can identify any kind of resource on the Internet, including images, text, video, audio and programs. The most common type of a URI is a URL..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Calculation.
- ObjectClassQualifierConceptPreferredName2 = Have.
- ObjectClassQualifierConceptPreferredName3 = Entity.
- ObjectClassQualifierConceptPreferredName4 = Reference Object.
- ObjectClassQualifierConceptPreferredName5 = Image.
- ObjectClassQualifierConceptPreferredName6 = Uniform Resource Identifier.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public UriImageReferenceEntityHasCalculationEntity Statement	Public ImageAnnotationStatement	

**UriImageReferenceEntityHasImagingObservationEntityStatement**

**Type:**      **Class**      **ImageAnnotationStatement**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      Created on 12/20/2011. Last modified on 1/2/2013.  
**GUID:**      {A96DC1B0-A1E6-4dc3-8AB6-B6E250BBE728}

A URI image reference can have an imaging observation. It is used in conjunction with UriImageReferenceHasImagingPhysicalEntityStatement.

#### **Custom Properties**

- isActive = False

#### **Tagged Values**

- CADSR\_Description = A URI image reference can have an imaging observation. It is used in conjunction with UriImageReferenceHasImagingPhysicalEntityStatement. .
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = A URI image reference can have an imaging observation. It is used in conjunction with UriImageReferenceHasImagingPhysicalEntityStatement. .
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C25598.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C48294.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptCode7 = C42778.
- ObjectClassQualifierConceptDefinition1 = Watching something and taking note of what happens..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = Something referred to; the object of a reference..

- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition7 = A character string that can identify any kind of resource on the Internet, including images, text, video, audio and programs. The most common type of a URI is a URL..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptDefinitionSource7 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Observation.
- ObjectClassQualifierConceptPreferredName2 = Image.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Reference Object.
- ObjectClassQualifierConceptPreferredName6 = Image.
- ObjectClassQualifierConceptPreferredName7 = Uniform Resource Identifier.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public UriImageReferenceEntityHasImagingObservationEntityStatement	Public ImageAnnotationStatement	

**UriImageReferenceEntityHasImagingPhysicalEntityStatement**

**Type:**      **Class**      **ImageAnnotationStatement**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      Created on 12/20/2011. Last modified on 1/2/2013.  
**GUID:**      {1F82ED81-3116-4812-9EEB-C3AF63F22EA8}

An URI image reference can have imaging physical entity associate with it.

#### **Custom Properties**

- isActive = False

#### **Tagged Values**

- CADSR\_Description = An URI image reference can have imaging physical entity associate with it. .
- CADSR\_Inherited.objectUniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.subjectUniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An URI image reference can have imaging physical entity associate with it. .
- ObjectClassConceptCode = C101134.
- ObjectClassConceptDefinition = A declaration of a relationship between entities, consisting of a subject, predicate and object..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity Statement.
- ObjectClassQualifierConceptCode1 = C25618.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptCode3 = C101282.
- ObjectClassQualifierConceptCode4 = C51070.
- ObjectClassQualifierConceptCode5 = C48294.
- ObjectClassQualifierConceptCode6 = C48179.
- ObjectClassQualifierConceptCode7 = C42778.
- ObjectClassQualifierConceptDefinition1 = Having substance or material existence; concerned with material things; of or pertaining to the body as distinguished from the mind or spirit..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition3 = Used to describe the possession, relationships, or the state of something or someone..
- ObjectClassQualifierConceptDefinition4 = An independently existing thing (living or nonliving)..
- ObjectClassQualifierConceptDefinition5 = Something referred to; the object of a reference..
- ObjectClassQualifierConceptDefinition6 = Any record of an imaging event whether physical or electronic..

- ObjectClassQualifierConceptDefinition7 = A character string that can identify any kind of resource on the Internet, including images, text, video, audio and programs. The most common type of a URI is a URL..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptDefinitionSource4 = NCI.
- ObjectClassQualifierConceptDefinitionSource5 = NCI.
- ObjectClassQualifierConceptDefinitionSource6 = NCI.
- ObjectClassQualifierConceptDefinitionSource7 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Physical.
- ObjectClassQualifierConceptPreferredName2 = Image.
- ObjectClassQualifierConceptPreferredName3 = Have.
- ObjectClassQualifierConceptPreferredName4 = Entity.
- ObjectClassQualifierConceptPreferredName5 = Reference Object.
- ObjectClassQualifierConceptPreferredName6 = Image.
- ObjectClassQualifierConceptPreferredName7 = Uniform Resource Identifier.
- OWNER\_REVIEWED = 1.

### Connections

Connector	Source	Target	Notes
<u>Generalization</u> Source -> Destination	Public UriImageReferenceEntityHasImagingPhysicalEntityStatement	Public ImageAnnotationStatement	

### AdjudicationObservation

Type:            Class  
Status:        Proposed. Version 1.0. Phase 1.0.  
Package:      AIM      Keywords:  
Detail:          *Created on 11/9/2011. Last modified on 11/21/2012.*  
GUID:          {820AFC5C-A235-41ab-85D6-E57798BA09C8}

An observation is made about comparison between two or more performers' clinical results (i.e., "adjudication"). It describes a specific time point or all previous time points as well that is explicitly called out.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An observation is made about comparison between two or more performers' clinical results (i.e., "adjudication"). It describes a specific time point or all previous time points as well that is explicitly called out..
- CURATOR REVIEWED = 1.
- documentation = An observation is made about comparison between two or more performers' clinical results (i.e., "adjudication"). It describes a specific time point or all previous time points as well that is explicitly called out..
- ObjectClassConceptCode = C25598.
- ObjectClassConceptDefinition = Watching something and taking note of what happens..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Observation.
- ObjectClassQualifierConceptCode1 = C86039.
- ObjectClassQualifierConceptDefinition1 = The final judgment in a legal proceeding..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Adjudication.
- OWNER REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private annotationOfAnnotation AnnotationOfAnnotation	Private adjudicationObservation AdjudicationObservation	

**Attributes**

Attribute	Notes	Constraints and tags
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Attribute	Notes	Constraints and tags
<b>observationScope</b> CD Private	Adjudication Observation Scope. Whether or not the adjudication is performed and recorded one time point at a time (sequential) or at a specific time point with reference to all preceding time points.	<p><i>Default:</i></p> <p>[CADSR_Description = Adjudication Observation Scope. Whether or not the adjudication is performed and recorded one time point at a time (sequential) or at a specific time point with reference to all preceding time points. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Adjudication Observation Scope. Whether or not the adjudication is performed and recorded one time point at a time (sequential) or at a specific time point with reference to all preceding time points. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C47825 ]</p> <p>[PropertyConceptDefinition = An area in which something acts or operates or has power or control. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Scope ]</p> <p>[PropertyQualifierConceptCode1 = C25598 ]</p> <p>[PropertyQualifierConceptDefinition1 = Watching something and taking note of what happens. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Observation ]</p>
<b>observationUid</b> II Private	Unique identifier for an occurrence of an adjudication observation.	<p><i>Default:</i></p> <p>[CADSR_Description = Unique identifier for an occurrence of an adjudication observation. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Unique identifier for an occurrence of an adjudication observation. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C70663 ]</p> <p>[PropertyConceptDefinition = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function,</p>

Attribute	Notes	Constraints and tags
		procedure, activity, variable, o ] [PropertyConceptDefinition_2 = r body of data. ] [PropertyConceptDefinitionSource = NCI ] [PropertyConceptPreferredName = Unique Identifier ] [PropertyQualifierConceptCode1 = C25598 ] [PropertyQualifierConceptDefinition1 = Watching something and taking note of what happens. ] [PropertyQualifierConceptDefinitionSource1 = NCI ] [PropertyQualifierConceptPreferredName1 = Observation ]
<b>personObserversRoleInThisProcedure</b> CD Private [0..1]	This is the role of the observers whose work is being adjudicated, e.g., a code for “reader”.	<p><i>Default:</i></p> <p>[CADSR_Description = This is the role of the observers whose work is being adjudicated, e.g., a code for “reader”. ]  [CURATOR REVIEWED = 1 ]  [description = This is the role of the observers whose work is being adjudicated, e.g., a code for “reader”. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C79751 ]  [PropertyConceptDefinition = Any stepwise set of actions. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Procedure ]  [PropertyQualifierConceptCode1 = C64956 ]  [PropertyQualifierConceptCode2 = C48835 ]  [PropertyQualifierConceptCode3 = C69245 ]  [PropertyQualifierConceptDefinition1 = The reason of something. ]  [PropertyQualifierConceptDefinition2 = The usual or expected function of something; the part something plays in an action or event. ]  [PropertyQualifierConceptDefinition3 = The name of the individual witnessing an event. ]  [PropertyQualifierConceptDefinitionSource1 = NCI ]  [PropertyQualifierConceptDefinitionSource2 = NCI ]</p>

Attribute	Notes	Constraints and tags
		<p><u>nSource2</u> = NCI ]  <u>[PropertyQualifierConceptDefinitionSource3</u> = NCI ]  <u>[PropertyQualifierConceptPreferredName1</u> = For ]  <u>[PropertyQualifierConceptPreferredName2</u> = Role ]  <u>[PropertyQualifierConceptPreferredName3</u> = Person Observer ]</p>
<b>identifierWithinAcceptedPersonObserversRole</b> ST Private [0..n]	This identifies which observer, if any, was chosen from the choices available (i.e., their results were accepted by the adjudicator).	<p><i>Default:</i></p> <p><u>[CADSR_Description</u> = This identifies which observer, if any, was chosen from the choices available (i.e., their results were accepted by the adjudicator). ]  <u>[CURATOR REVIEWED</u> = 1 ]  <u>[description</u> = This identifies which observer, if any, was chosen from the choices available (i.e., their results were accepted by the adjudicator). ]  <u>[OWNER REVIEWED</u> = 1 ]  <u>[PropertyConceptCode</u> = C48835 ]  <u>[PropertyConceptDefinition</u> = The usual or expected function of something; the part something plays in an action or event. ]  <u>[PropertyConceptDefinitionSource</u> = NCI ]  <u>[PropertyConceptPreferredName</u> = Role ]  <u>[PropertyQualifierConceptCode1</u> = C69245 ]  <u>[PropertyQualifierConceptCode2</u> = C62559 ]  <u>[PropertyQualifierConceptCode3</u> = C25282 ]  <u>[PropertyQualifierConceptCode4</u> = C25364 ]  <u>[PropertyQualifierConceptDefinitionn1</u> = The name of the individual witnessing an event. ]  <u>[PropertyQualifierConceptDefinitionn2</u> = Generally approved or used. ]  <u>[PropertyQualifierConceptDefinitionn3</u> = On the inside; contained in. ]  <u>[PropertyQualifierConceptDefinitionn4</u> = One or more characters used to identify, name, or characterize the nature, properties, or contents of a thing. ]  <u>[PropertyQualifierConceptDefinition</u></p>

Attribute	Notes	Constraints and tags
		<u>nSource1</u> = NCI ] [ <u>PropertyQualifierConceptDefinition</u> <u>nSource2</u> = NCI ] [ <u>PropertyQualifierConceptDefinition</u> <u>nSource3</u> = NCI ] [ <u>PropertyQualifierConceptDefinition</u> <u>nSource4</u> = NCI ] [ <u>PropertyQualifierConceptPreferredName</u> 1 = Person Observer ] [ <u>PropertyQualifierConceptPreferredName</u> 2 = Accepted ] [ <u>PropertyQualifierConceptPreferredName</u> 3 = Within ] [ <u>PropertyQualifierConceptPreferredName</u> 4 = Identifier ]
<b>identifierWithinRejectedPersonObserversRole</b> ST Private [0..n]	This identifies which observer(s) were not chosen from the choices available (i.e., their results were rejected by the adjudicator, in favor of the results of the identifier within an accepted person observer's role.	Default:  [ <u>CADSR_Description</u> = This identifies which observer(s) were not chosen from the choices available (i.e., their results were rejected by the adjudicator, in favor of the results of the identifier within an accepted person observer's role. ] [ <u>CURATOR REVIEWED</u> = 1 ] [ <u>description</u> = This identifies which observer(s) were not chosen from the choices available (i.e., their results were rejected by the adjudicator, in favor of the results of the identifier within an accepted person observer's role. ] [ <u>OWNER REVIEWED</u> = 1 ] [ <u>PropertyConceptCode</u> = C48835 ] [ <u>PropertyConceptDefinition</u> = The usual or expected function of something; the part something plays in an action or event. ] [ <u>PropertyConceptDefinitionSource</u> = NCI ] [ <u>PropertyConceptPreferredName</u> = Role ] [ <u>PropertyQualifierConceptCode</u> 1 = C69245 ] [ <u>PropertyQualifierConceptCode</u> 2 = C69304 ] [ <u>PropertyQualifierConceptCode</u> 3 = C25282 ] [ <u>PropertyQualifierConceptCode</u> 4 = C25364 ] [ <u>PropertyQualifierConceptDefinition</u> n1 = The name of the individual witnessing an event. ]

Attribute	Notes	Constraints and tags
		<p>[PropertyQualifierConceptDefinition  <u>n2</u> = Having been judged unacceptable. ]</p> <p>[PropertyQualifierConceptDefinition  <u>n3</u> = On the inside; contained in. ]</p> <p>[PropertyQualifierConceptDefinition  <u>n4</u> = One or more characters used to identify, name, or characterize the nature, properties, or contents of a thing. ]</p> <p>[PropertyQualifierConceptDefinition  <u>nSource1</u> = NCI ]</p> <p>[PropertyQualifierConceptDefinition  <u>nSource2</u> = NCI ]</p> <p>[PropertyQualifierConceptDefinition  <u>nSource3</u> = NCI ]</p> <p>[PropertyQualifierConceptDefinition  <u>nSource4</u> = NCI ]</p> <p>[PropertyQualifierConceptPreferred  <u>Name1</u> = Person Observer ]</p> <p>[PropertyQualifierConceptPreferred  <u>Name2</u> = Rejected ]</p> <p>[PropertyQualifierConceptPreferred  <u>Name3</u> = Within ]</p> <p>[PropertyQualifierConceptPreferred  <u>Name4</u> = Identifier ]</p>
<b>reasonForChoice</b> CD Private	Coded reason for accepting and/or rejecting observers.	<p><i>Default:</i></p> <p>[CADSR_Description = Coded reason for accepting and/or rejecting observers. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Coded reason for accepting and/or rejecting observers. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C48912 ]</p> <p>[PropertyConceptDefinition = Select from a group. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Choose ]</p> <p>[PropertyQualifierConceptCode1 = C64956 ]</p> <p>[PropertyQualifierConceptCode2 = C25638 ]</p> <p>[PropertyQualifierConceptDefinition  <u>n1</u> = The reason of something. ]</p> <p>[PropertyQualifierConceptDefinition  <u>n2</u> = An explanation of the cause of some phenomenon or action. ]</p> <p>[PropertyQualifierConceptDefinition</p>

Attribute	Notes	Constraints and tags
		<p><u>nSource1</u> = NCI ]  <u>[PropertyQualifierConceptDefinitionSource2</u> = NCI ]  <u>[PropertyQualifierConceptPreferredName1</u> = For ]  <u>[PropertyQualifierConceptPreferredName2</u> = Reason ]</p>
<b>reasonForDiscordance</b> CD Private [0..1]	Adjudication discordance reason.	<p><i>Default:</i></p> <p><u>[CADSR_Description</u> = Adjudication discordance reason. ]  <u>[CURATOR REVIEWED</u> = 1 ]  <u>[description</u> = Adjudication discordance reason. ]  <u>[OWNER REVIEWED</u> = 1 ]  <u>[PropertyConceptCode</u> = C101125 ]  <u>[PropertyConceptDefinition</u> = The situation when there is a disconnected event or divergent incident. ]  <u>[PropertyConceptDefinitionSource</u> = NCI ]  <u>[PropertyConceptPreferredName</u> = Discordant ]  <u>[PropertyQualifierConceptCode1</u> = C64956 ]  <u>[PropertyQualifierConceptCode2</u> = C25638 ]  <u>[PropertyQualifierConceptDefinition</u> n1 = The reason of something. ]  <u>[PropertyQualifierConceptDefinition</u> n2 = An explanation of the cause of some phenomenon or action. ]  <u>[PropertyQualifierConceptDefinitionSource1</u> = NCI ]  <u>[PropertyQualifierConceptDefinitionSource2</u> = NCI ]  <u>[PropertyQualifierConceptPreferredName1</u> = For ]  <u>[PropertyQualifierConceptPreferredName2</u> = Reason ]</p>
<b>comment</b> ST Private [0..1]	Information about adjudication observations. Comment cannot be empty text if the attribute is present.	<p><i>Default:</i></p> <p><u>[CADSR_Description</u> = Information about adjudication observations.  Comment cannot be empty text if the attribute is present. ]  <u>[CURATOR REVIEWED</u> = 1 ]  <u>[description</u> = Information about adjudication observations. Comment cannot be empty text if the attribute is present. ]</p>

Attribute	Notes	Constraints and tags
		<p>[OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25393 ]  [PropertyConceptDefinition = A written explanation, observation or criticism added to textual material. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Comment ]</p>
<b>imageQualityIssuesDiscordance BL</b> Private	Image quality issues contribute to discordance.	<p><i>Default:</i></p> <p>[CADSR Description = Image quality issues contribute to discordance. ]  [CURATOR REVIEWED = 1 ]  [description = Image quality issues contribute to discordance. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C101125 ]  [PropertyConceptDefinition = The situation when there is a disconnected event or divergent incident. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Discordant ]  [PropertyQualifierConceptCode1 = C43415 ]  [PropertyQualifierConceptCode2 = C25283 ]  [PropertyQualifierConceptCode3 = C48179 ]  [PropertyQualifierConceptDefinition1 = One of a series of documents that are published periodically. ]  [PropertyQualifierConceptDefinition2 = An essential and distinguishing attribute of something or someone; a degree or grade of excellence or worth. ]  [PropertyQualifierConceptDefinition3 = Any record of an imaging event whether physical or electronic. ]  [PropertyQualifierConceptDefinitionSource1 = NCI ]  [PropertyQualifierConceptDefinitionSource2 = NCI ]  [PropertyQualifierConceptDefinitionSource3 = NCI ]  [PropertyQualifierConceptPreferredName1 = Issue ]</p>

Attribute	Notes	Constraints and tags
		[PropertyQualifierConceptPreferred Name2 = Quality ] [PropertyQualifierConceptPreferred Name3 = Image ]

**Operations**

Method	Notes	Parameters
<b>GetComment()</b> ST Public		
<b>SetComment()</b> void Public		<b>ST</b> [in] newVal
<b>GetIdentifierWithinAcceptedPersonObserversRole()</b> ST Public		
<b>SetIdentifierWithinAcceptedPersonObserversRole()</b> void Public		<b>ST</b> [in] newVal
<b>GetPersonObserversRoleInThisProcedure()</b> CD Public		
<b>SetPersonObserversRoleInThisProcedure()</b> void Public		<b>CD</b> [in] newVal
<b>GetIdentifierWithinRejectedPersonObserversRole()</b> ST Public		
<b>GetReasonForDiscordance()</b> CD Public		
<b>SetIdentifierWithinRejectedPersonObserversRole()</b> void Public		<b>ST</b> [in] newVal
<b>SetReasonForDiscordance()</b> void Public		<b>CD</b> [in] newVal
<b>GetReasonForChoice()</b> CD Public		
<b>SetReasonForChoice()</b> void Public		<b>CD</b> [in] newVal
<b>GetimageQualityIssuesDiscordance()</b> BL Public	Image quality issues contribute to discordance.	

Method	Notes	Parameters
<b>GetObservationScope()</b> CD Public		
<b>GetObservationUid()</b> II Public		
<b>SetImageQualityIssuesDiscordance()</b> void Public	Image quality issues contribute to discordance.	<b>BL</b> [in] newVal
<b>SetObservationScope()</b> void Public		<b>CD</b> [in] newVal
<b>SetObservationUid()</b> void Public		<b>II</b> [in] newVal

## Algorithm

Type: **Class**

Status: Proposed. Version 1.0. Phase 1.0.

Package: AIM      *Keywords:*

Detail: *Created on 11/9/2011. Last modified on 11/21/2012.*

GUID: {C6DDDB74-FE2F-4a6f-ABFA-9E23654BB3E6}

A well-defined instructions for arriving to result(s).

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = A well-defined instructions for arriving to result(s)..
- CURATOR REVIEWED = 1.
- documentation = A well-defined instructions for arriving to result(s)..
- ObjectClassConceptCode = C16275.
- ObjectClassConceptDefinition = A defined procedure for solving a problem. Applied to a problem-solving procedure implemented in software to be executed by a computer..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Algorithm.
- OWNER REVIEWED = 1.

### Connections

Connector	Source	Target	Notes
<b>Association</b> Source -> Destination	Private calculationEntity CalculationEntity	Private algorithm Algorithm	
<b>Association</b> Source -> Destination	Private algorithm Algorithm	Private parameterCollection Parameter	

**Attributes**

Attribute	Notes	Constraints and tags
<b>name</b> ST Private	A name of the algorithm.	<p><i>Default:</i></p> <p>[CADSR_Description = A name of the algorithm. ]  [CURATOR REVIEWED = 1 ]  [description = A name of the algorithm. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C42614 ]  [PropertyConceptDefinition = The words or language units by which a thing is known. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Name ]</p>
<b>type</b> CD Private  [1..n]	The family (class) to which an algorithm belongs.	<p><i>Default:</i></p> <p>[CADSR_Description = The family (class) to which an algorithm belongs. ]  [CURATOR REVIEWED = 1 ]  [description = The family (class) to which an algorithm belongs. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25284 ]  [PropertyConceptDefinition = Something distinguishable as an identifiable class based on common qualities. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Type ]</p>

Attribute	Notes	Constraints and tags
<b>uniqueIdentifier</b> II Private [0..1]	A UID (DICOM-like unique identifier) of an algorithm.	<p><i>Default:</i></p> <p>[CADSR_Description = A UID (DICOM-like unique identifier) of an algorithm.]    [CURATOR REVIEWED = 1]    [description = A UID (DICOM-like unique identifier) of an algorithm.]    [OWNER REVIEWED = 1]    [PropertyConceptCode = C70663]    [PropertyConceptDefinition = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o]    [PropertyConceptDefinition_2 = r body of data.]    [PropertyConceptDefinitionSource = NCI]    [PropertyConceptPreferredName = Unique Identifier]</p>
<b>version</b> ST Private [0..1]	Information describing a version of algorithm.	<p><i>Default:</i></p> <p>[CADSR_Description = Information describing a version of algorithm. The name assigned by a manufacturer to a specific software application (e.g., a plug-in).]    [CURATOR REVIEWED = 1]    [description = Information describing a version of algorithm. The name assigned by a manufacturer to a specific software application (e.g., a plug-in).]    [OWNER REVIEWED = 1]    [PropertyConceptCode = C25714]    [PropertyConceptDefinition = A form or variant of a type or original; one of a sequence of copies of a program, each incorporating new modifications.]    [PropertyConceptDefinitionSource = NCI]    [PropertyConceptPreferredName = Version]</p>

Attribute	Notes	Constraints and tags
<b>description</b> ST Private [0..1]	Human readable description of the algorithm.	<p><i>Default:</i></p> <p>[CADSR_Description = Human readable description of the algorithm.]          [CURATOR REVIEWED = 1]          [description = Human readable description of the algorithm.]          [OWNER REVIEWED = 1]          [PropertyConceptCode = C25365]          [PropertyConceptDefinition = A written or verbal account, representation, statement, or explanation of something.]          [PropertyConceptDefinitionSource = NCI]          [PropertyConceptPreferredName = Description]</p>

***Operations***

Method	Notes	Parameters
<b>GetName()</b> ST Public	A name of the algorithm.	
<b>GetType()</b> CD Public	The family (class) to which an algorithm belongs.	
<b>GetUniqueIdentifier()</b> II Public	A UID of an algorithm.	
<b>GetVersion()</b> ST Public	Information describing a version of algorithm.	
<b>SetName()</b> void Public	A name of the algorithm.	<b>ST</b> [in] newVal
<b>SetType()</b> void Public	The family (class) to which an algorithm belongs.	<b>CD</b> [in] newVal
<b>SetUniqueIdentifier()</b> void Public	A UID of an algorithm.	<b>II</b> [in] newVal
<b>SetVersion()</b> void Public	Information describing a version of algorithm.	<b>ST</b> [in] newVal
<b>GetDescription()</b> ST Public	Human readable description of algorithm.	
<b>SetDescription()</b> void Public	Human readable description of algorithm.	<b>ST</b> [in] newVal
<b>GetParameterCollection()</b> Parameter[] Public		
<b>SetParameterCollection()</b> void		<b>Parameter[]</b> [in] parameter

Method	Notes	Parameters
Public		

## *ImagingPhysicalEntity*

*Type:*      **Class**    **Entity**

*Status:*      Proposed. Version 1.0. Phase 1.0.

*Package:*      AIM      *Keywords:*

*Detail:*      *Created on 11/9/2011. Last modified on 12/20/2011.*

*GUID:*      {DDCD5DA1-808C-4db3-8DA1-5F6957C7AC7C}

ImagingPhysicalEntity is an entity or object that can be identified on an image. For medical imaging, it may represent anatomical location of an organ or body structure. Terms from controlled vocabulary such as RadLex, SNOMED CT, DCIOM, etc. are used to record the type of entity.

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = AnatomicEntity is an anatomical location term from a recognized controlled vocabulary (RadLex, SNOMED-CT, UMLS, etc)..
- CADSR\_Inherited.uniqueIdentifier.OWNER\_REVIEWS = 1.
- CURATOR\_REVIEWS = 1.
- documentation = ImagingPhysicalEntity is an entity or object that can be identified on an image. For medical imaging, it may represent anatomical location of an organ or body structure using e.g. RadLex, DICOM, etc..
- ObjectClassConceptCode = C51070.
- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.
- ObjectClassQualifierConceptCode1 = C25618.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptDefinition1 = Having substance or material existence; concerned with material things; of or pertaining to the body as distinguished from the mind or spirit..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.

- ObjectClassQualifierConceptPreferredName1 = Physical.
- ObjectClassQualifierConceptPreferredName2 = Image.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private annotationEntity AnnotationEntity	Private imagingPhysicalEntity Collection ImagingPhysicalEntity	
<b>Association</b> Bi-Directional	Private imagingPhysicalEntity ImagingPhysicalEntity	Private imagingPhysicalEntity CharacteristicCollection ImagingPhysicalEntity Characteristic	
<b>Generalization</b> Source -> Destination	Public ImagingPhysicalEntity	Public Entity	
<b>Association</b> Bi-Directional	Private imagingPhysicalEntity ImagingPhysicalEntity	Private imagingObservationCh aracteristicCollection ImagingObservationCh aracteristic	

***Attributes***

Attribute	Notes	Constraints and tags
<b>typeCode</b> CD Private [1..n]	Coded entry data used to describe or capture an imaging physical entity.	<p><i>Default:</i></p> <p>[CADSR_Description = Coded entry data used to describe or capture an imaging physical entity. ]            [CURATOR_REVIEWED = 1 ]            [description = Coded entry data used to describe or capture an imaging physical entity. ]            [OWNER_REVIEWED = 1 ]            [PropertyConceptCode = C93698 ]            [PropertyConceptDefinition = A coded value specifying an identifiable class of an entity or activity based on common qualities. ]            [PropertyConceptDefinitionSource = NCI ]            [PropertyConceptPreferredName = Type Code ]</p>

Attribute	Notes	Constraints and tags
<b>questionTypeCode</b> CD Private [0..n]	Coded entry data used to describe or capture the question being asked about imaging physical entity. It is associated with the typeCode.	<i>Default:</i> <code>[CADSR_Description = Coded entry data used to describe or capture the question being asked about imaging physical entity. It is associated with the typeCode.]</code> <code>[CURATOR REVIEWED = 1]</code> <code>[description = Coded entry data used to describe or capture the question being asked about imaging physical entity. It is associated with the typeCode.]</code> <code>[OWNER REVIEWED = 1]</code> <code>[PropertyConceptCode = C93698]</code> <code>[PropertyConceptDefinition = A coded value specifying an identifiable class of an entity or activity based on common qualities.]</code> <code>[PropertyConceptDefinitionSource = NCI]</code> <code>[PropertyConceptPreferredName = Type Code]</code> <code>[PropertyQualifierConceptCode1 = C41116]</code> <code>[PropertyQualifierConceptDefinition1 = A sentence of inquiry that asks for a reply; a request for information (e.g., a formal request to a database or search engine).]</code> <code>[PropertyQualifierConceptDefinitionSource1 = NCI]</code> <code>[PropertyQualifierConceptPreferredName1 = Question]</code>
<b>isPresent</b> BL Private [0..1]	A boolean value indicates whether or not an imaging physical entity exist in observed image(s).	<i>Default:</i> <code>[CADSR_Description = A boolean value indicates whether or not an imaging observation exist in observed image(s).]</code> <code>[CURATOR REVIEWED = 1]</code> <code>[description = A boolean value indicates whether or not an imaging observation exist in observed]</code>

Attribute	Notes	Constraints and tags
		<p>image(s). ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C25626 ]</p> <p>[<u>PropertyConceptDefinition</u> = Being or existing in a specified place or at the specified time. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Present ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C45254 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = The type of an expression with two possible values, "true" and "false". Also, a variable of Boolean type or a function with Boolean arguments or result. The most common Boolean functions are AND, OR and NOT. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Boolean ]</p>
<b>annotatorConfidence</b> REAL Private  [0..1]	annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.	<p><i>Default:</i></p> <p>[<u>CADSR Description</u> = annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level. ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C49020 ]</p> <p>[<u>PropertyConceptDefinition</u> = The statistical calculation of the percentage likelihood for a given set of data to have a given statistical value. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Statistical Confidence ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C69245 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = The name of the individual witnessing an event. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p>

Attribute	Notes	Constraints and tags
		<u>[PropertyQualifierConceptPreferredName1 = Person Observer ]</u>
<b>label</b> ST Private [0..1]	A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute.	<p><i>Default:</i></p> <u>[CADSR_Description = A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute. ]</u> <u>[CURATOR REVIEWED = 1 ]</u> <u>[description = A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute. ]</u> <u>[OWNER REVIEWED = 1 ]</u> <u>[PropertyConceptCode = C45561 ]</u> <u>[PropertyConceptDefinition = A brief description given for purposes of identification; an identifying or descriptive marker that is attached to an object. ]</u> <u>[PropertyConceptDefinitionSource = NCI ]</u> <u>[PropertyConceptPreferredName = Label ]</u>
<b>questionIndex</b> INT Private [0..1]	It is used to store an index value that identifies the order of each question in an imagingPhysicalEntity collection.	<p><i>Default:</i></p> <u>[CADSR_Description = It is used to store an index value that identifies the order of each question in an imagingPhysicalEntity collection. ]</u> <u>[CADSR_VD_ID = 2803195 ]</u> <u>[CADSR_VD_VERSION = 1.0 ]</u> <u>[CURATOR REVIEWED = 1 ]</u> <u>[description = It is used to store an index value that identifies the order of each question in an imagingPhysicalEntity collection. ]</u> <u>[OWNER REVIEWED = 1 ]</u> <u>[PropertyConceptCode = C25390 ]</u> <u>[PropertyConceptDefinition = A numerical scale used to compare variables with one another or with some reference number; a number used to select an element of a list, ]</u>

Attribute	Notes	Constraints and tags
		vector, array or other sequence. ] [ <u>PropertyConceptDefinitionSource</u> = NCI ] [ <u>PropertyConceptPreferredName</u> = Index ] [ <u>PropertyQualifierConceptCode1</u> = C41116 ] [ <u>PropertyQualifierConceptDefinition1</u> = A sentence of inquiry that asks for a reply; a request for information (e.g., a formal request to a database or search engine). ] [ <u>PropertyQualifierConceptDefinitionSource1</u> = NCI ] [ <u>PropertyQualifierConceptPreferredName1</u> = Question ]
<b>comment</b> ST Private  [0..1]	Free text about the imaging physical entity.	<i>Default:</i>  [ <u>CADSR_Description</u> = Free text about the imaging physical entity. ] [ <u>description</u> = Free text about the imaging physical entity. ] [ <u>OWNER REVIEWED</u> = 1 ] [ <u>PropertyConceptCode</u> = C25393 ] [ <u>PropertyConceptDefinition</u> = A written explanation, observation or criticism added to textual material. ] [ <u>PropertyConceptDefinitionSource</u> = NCI ] [ <u>PropertyConceptPreferredName</u> = Comment ]

**Operations**

Method	Notes	Parameters
<b>GetImagingPhysicalEntityCharacteristicCollection()</b> ImagingPhysicalEntityCharacteristic[] Public		
<b>GetUniqueIdentifier()</b> II Public	An identifier string that can either be a string representation such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a specific subtype such as Imaging Physical Entity, Imaging Observation, Calculation, Image Reference and	
<b>SetUniqueIdentifier()</b> void Public	An identifier string that can either be a string representation such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a specific subtype such as Imaging	<b>II</b> [in] newVal

Method	Notes	Parameters
	Physical Entity, Imaging Observation, Calculation, Image Reference and	
<b>GetQuestionIndex()</b> INT Public		
<b>SetQuestionIndex()</b> void Public		INT [in] newVal
<b>GetAnnotatorConfidence()</b> REAL Public	annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.	
<b>SetImagingPhysicalEntityCharacteristicCollection()</b> void Public		ImagingPhysicalEntityCharacteristic[] [in] imagingPhysicalEntityCharacteristic
<b>SetAnnotatorConfidence()</b> void Public	annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.	REAL [in] newVal
<b>GetIsPresent()</b> BL Public	A boolean value indicates whether or not an imaging physical entity exist in observed image(s).	
<b>SetIsPresent()</b> void Public	A boolean value indicates whether or not an imaging physical entity exist in observed image(s).	BL [in] newVal
<b>GetLabel()</b> ST Public	A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute.	
<b>SetLabel()</b> void Public	A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute.	ST [in] newVal
<b>GetQuestionTypeCode()</b> CD Public	Coded entry data used to describe or capture the question being asked about imaging physical entity. It is associated with the typeCode.	
<b>SetQuestionTypeCode()</b> void Public	Coded entry data used to describe or capture the question being asked about imaging physical entity. It is associated with the typeCode.	CD [in] newVal
<b>GetTypeCode()</b> CD Public	Coded entry data used to describe or capture an imaging physical entity.	
<b>SetTypeCode()</b> void Public	Coded entry data used to describe or capture an imaging physical entity.	CD [in] newVal
<b>GetImagingObservationCharacteristicCollection()</b>		

Method	Notes	Parameters
) ImagingObservationCharacteristic[] Public		
<b>SetImagingObservationCharacteristicCollection()</b> void Public		<b>ImagingObservationCharacteristic[] [in]</b> imagingObservationCharacteristic

### *ImagingPhysicalEntityCharacteristic*

*Type:*            **Class**

*Status:*        Proposed. Version 1.0. Phase 1.0.

*Package:*      AIM      *Keywords:*

*Detail:*          *Created on 11/9/2011. Last modified on 1/2/2013.*

*GUID:*          {97FDCE88-5BC5-41bd-B04C-EACC12DEB55E}

ImagingPhysicalEntityCharacteristic are characteristics of imaging physical entities. These are in contradistinction to ImagingObservationCharacteristic. So, for example in a medical area, "dilated" might be an imaging physical entity characteristic of the "colon" imaging physical entity.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = AnatomicEntityCharacteristic are characteristics of anatomic entities. These are in contradistinction to ImagingObservationCharacteristic. So, for example, "dilated" might be an AnatomicEntityCharacteristic of the "colon" AnatomicEntity..
- CURATOR REVIEWED = 1.
- documentation = ImagingPhysicalEntityCharacteristic are characteristics of imaging physical entities. .
- ObjectClassConceptCode = C25447.
- ObjectClassConceptDefinition = The distinguishing qualities or prominent aspect of a person, object, action, process, or substance..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Characteristic.
- ObjectClassQualifierConceptCode1 = C51070.
- ObjectClassQualifierConceptCode2 = C25618.
- ObjectClassQualifierConceptCode3 = C48179.
- ObjectClassQualifierConceptDefinition1 = An independently existing thing (living or nonliving)..

- ObjectClassQualifierConceptDefinition2 = Having substance or material existence; concerned with material things; of or pertaining to the body as distinguished from the mind or spirit..
- ObjectClassQualifierConceptDefinition3 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptDefinitionSource3 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Entity.
- ObjectClassQualifierConceptPreferredName2 = Physical.
- ObjectClassQualifierConceptPreferredName3 = Image.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b><u>Association</u></b> Bi-Directional	Private imagingPhysicalEntity ImagingPhysicalEntity	Private imagingPhysicalEntity CharacteristicCollection ImagingPhysicalEntity Characteristic	
<b><u>Association</u></b> Bi-Directional	Private imagingPhysicalEntity Characteristic ImagingPhysicalEntity Characteristic	Private characteristicQuantificationCollection CharacteristicQuantification	

***Attributes***

Attribute	Notes	Constraints and tags
<b>typeCode CD</b> Private [1..n]	Coded entry data used to describe or capture an anatomic entity characteristic.	<i>Default:</i>  <u>[CADSR_Description</u> = Coded entry data used to describe or capture an anatomic entity characteristic. ] <u>[CURATOR REVIEWED</u> = 1 ] <u>[description</u> = Coded entry data used to describe or capture an anatomic entity characteristic. ] <u>[OWNER REVIEWED</u> = 1 ] <u>[PropertyConceptCode</u> = C93698 ] <u>[PropertyConceptDefinition</u> = A coded value specifying an

Attribute	Notes	Constraints and tags
		identifiable class of an entity or activity based on common qualities. ] <u>[PropertyConceptDefinitionSource = NCI ]</u> <u>[PropertyConceptPreferredName = Type Code ]</u>
<b>questionTypeCode</b> CD Private [0..n]	Coded entry data used to describe or capture the question being asked about anatomic entity characteristic. It is associated with the typeCode.	<p><i>Default:</i></p> <u>[CADSR_Description = Coded entry data used to describe or capture the question being asked about anatomic entity characteristic. It is associated with the typeCode.]</u> <u>[CURATOR REVIEWED = 1 ]</u> <u>[description = Coded entry data used to describe or capture the question being asked about anatomic entity characteristic. It is associated with the typeCode.]</u> <u>[OWNER REVIEWED = 1 ]</u> <u>[PropertyConceptCode = C93698 ]</u> <u>[PropertyConceptDefinition = A coded value specifying an identifiable class of an entity or activity based on common qualities.]</u> <u>[PropertyConceptDefinitionSource = NCI ]</u> <u>[PropertyConceptPreferredName = Type Code ]</u> <u>[PropertyQualifierConceptCode1 = C41116 ]</u> <u>[PropertyQualifierConceptDefinition1 = A sentence of inquiry that asks for a reply; a request for information (e.g., a formal request to a database or search engine). ]</u> <u>[PropertyQualifierConceptDefinitionSource1 = NCI ]</u> <u>[PropertyQualifierConceptPreferredName1 = Question ]</u>
<b>annotatorConfidence</b> REAL Private [0..1]	annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.	<p><i>Default:</i></p> <u>[CADSR_Description = annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.]</u> <u>[CURATOR REVIEWED = 1 ]</u> <u>[description = annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence</u>

Attribute	Notes	Constraints and tags
		<p>level. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C49020 ]</p> <p>[<u>PropertyConceptDefinition</u> = The statistical calculation of the percentage likelihood for a given set of data to have a given statistical value. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Statistical Confidence ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C69245 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = The name of the individual witnessing an event. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Person Observer ]</p>
<b>label</b> ST Private [0..1]	A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute.	<p><i>Default:</i></p> <p>[<u>CADSR Description</u> = A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute. ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C45561 ]</p> <p>[<u>PropertyConceptDefinition</u> = A brief description given for purposes of identification; an identifying or descriptive marker that is attached to an object. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Label ]</p>

Attribute	Notes	Constraints and tags
<b>questionIndex</b> INT Private [0..1]	It is used to store an index value that identifies the order of each question in an imagingPhysicalEntityCharacteristic collection.	<p><i>Default:</i></p> <p>[CADSR_Description = It is used to store an index value that identifies the order of each question in an imagingPhysicalEntityCharacteristic collection.]</p> <p>[CADSR_VD_ID = 2803195]</p> <p>[CADSR_VD_VERSION = 1.0]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[description = It is used to store an index value that identifies the order of each question in an imagingPhysicalEntityCharacteristic collection.]</p> <p>[OWNER REVIEWED = 1]</p> <p>[PropertyConceptCode = C25390]</p> <p>[PropertyConceptDefinition = A numerical scale used to compare variables with one another or with some reference number; a number used to select an element of a list, vector, array or other sequence.]</p> <p>[PropertyConceptDefinitionSource = NCI]</p> <p>[PropertyConceptPreferredName = Index]</p> <p>[PropertyQualifierConceptCode1 = C41116]</p> <p>[PropertyQualifierConceptDefinition1 = A sentence of inquiry that asks for a reply; a request for information (e.g., a formal request to a database or search engine).]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI]</p> <p>[PropertyQualifierConceptPreferredName1 = Question]</p>
<b>comment</b> ST Private [0..1]	Free text about the imaging physical entity characteristic.	<p><i>Default:</i></p> <p>[CADSR_Description = Free text about the imaging physical entity characteristic.]</p> <p>[description = Free text about the imaging physical entity characteristic.]</p> <p>[OWNER REVIEWED = 1]</p> <p>[PropertyConceptCode = C25393]</p> <p>[PropertyConceptDefinition = A written explanation, observation or criticism added to textual material.]</p> <p>[PropertyConceptDefinitionSource = NCI]</p>

Attribute	Notes	Constraints and tags
		[PropertyConceptPreferredName = Comment ]

**Operations**

Method	Notes	Parameters
<b>GetTypeCode()</b> CD Public		
<b>SetTypeCode()</b> void Public		<b>CD</b> [in] newVal
<b>GetAnnotatorConfidence</b> 0 REAL Public		
<b>SetAnnotatorConfidence(</b> ) void Public		<b>REAL</b> [in] newVal
<b>GetLabel()</b> ST Public		
<b>SetLabel()</b> void Public		<b>ST</b> [in] newVal
<b>GetQuestionTypeCode()</b> CD Public	Coded entry data used to describe or capture the question being asked about anatomic entity characteristic. It is associated with the typeCode.	
<b>SetQuestionTypeCode()</b> void Public	Coded entry data used to describe or capture the question being asked about anatomic entity characteristic. It is associated with the typeCode.	<b>CD</b> [in] newVal
<b>GetQuestionIndex()</b> INT Public	It is used to store an index value that identifies the order of each question in an imagingPhysicalEntityCharacteristic collection.	
<b>SetQuestionIndex()</b> void Public	It is used to store an index value that identifies the order of each question in an imagingPhysicalEntityCharacteristic collection.	<b>INT</b> [in] newVal
<b>GetCharacteristicQuantificationCollection()</b> CharacteristicQuantification [] Public		
<b>SetCharacteristicQuantificationCollection()</b> void Public		<b>CharacteristicQuantification</b> [] [in] CharacteristicQuantification

Method	Notes	Parameters
<b>GetComment()</b> ST Public		
<b>SetComment()</b> void Public		<b>ST</b> [in] newVal

## *AnnotationEntity*

Type:           **Class**     **Entity**

Status:       Proposed. Version 1.0. Phase 1.0.

Package:      AIM        **Keywords:**

Detail:        *Created on 11/9/2011. Last modified on 4/2/2012.*

**GUID:**       {B4A0DC0D-9C0F-44bb-B969-E291497850CD}

AnnotationEntity captures information that can be described, measured, calculated and drawn on image(s) either from a human or machine observer.

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = Annotation is the abstract base class for the AIM project. Annotation captures image content related information from a human or machine observer. ImageAnnotations annotate images. AnnotationOfAnnotations annotate other annotations..
- CADSR\_Inherited.uniqueIdentifier.OWNER\_REVIEWS = 1.
- CURATOR\_REVIEWS = 1.
- documentation = AnnotationEntity captures information that can be described, measured, calculated and drawn on image(s) either from a human or machine observer. .
- ObjectClassConceptCode = C51070.
- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.
- ObjectClassQualifierConceptCode1 = C44272.
- ObjectClassQualifierConceptDefinition1 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Annotation.

- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private annotationEntity AnnotationEntity	Private imagingPhysicalEntity Collection ImagingPhysicalEntity	
<b>Association</b> Bi-Directional	Private annotationEntity AnnotationEntity	Private inferenceEntityCollecti on InferenceEntity	
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotatio n	Public AnnotationEntity	
<b>Association</b> Bi-Directional	Private annotationEntity AnnotationEntity	Private taskContextEntityColle ction TaskContextEntity	
<b>Generalization</b> Source -> Destination	Public ImageAnnotation	Public AnnotationEntity	
<b>Association</b> Bi-Directional	Private annotationEntity AnnotationEntity	Private annotationRoleEntityCo llection AnnotationRoleEntity	
<b>Association</b> Bi-Directional	Private annotationEntity AnnotationEntity	Private imagingObservationEnt ityCollection ImagingObservationEnt ity	
<b>Association</b> Bi-Directional	Private annotationEntity AnnotationEntity	Private calculationEntityCollect ion CalculationEntity	
<b>Generalization</b> Source -> Destination	Public AnnotationEntity	Public Entity	
<b>Association</b> Bi-Directional	Private annotationEntity AnnotationEntity	Private auditTrailCollection AuditTrail	
<b>Association</b> Bi-Directional	Private lesionObservationEntity Collection LesionObservationEntit	Private annotationEntity AnnotationEntity	

Connector	Source	Target	Notes
	y		

**Attributes**

Attribute	Notes	Constraints and tags
<b>typeCode</b> CD Private [1..n]	Coded entry data used to describe or capture a type of an annotation.	<p><i>Default:</i></p> <p>[CADSR_Description = Coded entry data used to describe or capture a type of an annotation.]  [CURATOR REVIEWED = 1]  [description = Coded entry data used to describe or capture a type of an annotation.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C93698]  [PropertyConceptDefinition = A coded value specifying an identifiable class of an entity or activity based on common qualities.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Type Code]</p>
<b>dateTime</b> TS Private	Date and Time (Julian) that the annotation was created	<p><i>Default:</i></p> <p>[CADSR_Description = Date and time when the Annotation is created.]  [CURATOR REVIEWED = 1]  [description = Date and time when the Annotation is created.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C37939]  [PropertyConceptDefinition = An expression of both date and time that an event has happened or will happen.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Date and Time]</p>
<b>name</b> ST Private	Human readable colloquial name of the annotation not guaranteed to be unique	<p><i>Default:</i></p> <p>[CADSR_Description = A human readable name for the annotation, for example, "Lymph node 42", or "target one".]  [CURATOR REVIEWED = 1]  [description = A human readable</p>

Attribute	Notes	Constraints and tags
		<p>name for the annotation, for example, "Lymph node 42", or "target one". ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C42614 ]</p> <p>[PropertyConceptDefinition = The words or language units by which a thing is known. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Name ]</p>
<b>comment</b> ST Private [0..1]	Free text about the annotation not intended for rendering on the image.	<p><i>Default:</i></p> <p><u>Pre-condition:</u> { Not Null }</p> <p>[CADSR Description = Free text about the annotation not intended for rendering on the image. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Free text about the annotation not intended for rendering on the image. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C25393 ]</p> <p>[PropertyConceptDefinition = A written explanation, observation or criticism added to textual material. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Comment ]</p>
<b>precedentReferencedAnnotationUid</b> II Private [0..1]	A Digital Imaging and Communication in Medicine (DICOM) (style) unique identifier for referencing earlier instance of AIM annotation.	<p><i>Default:</i></p> <p>[CADSR Description = A Digital Imaging and Communication in Medicine (DICOM) (style) unique identifier for referencing earlier instance of AIM annotation. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = A Digital Imaging and Communication in Medicine (DICOM) (style) unique identifier for referencing earlier instance of AIM annotation. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C70663 ]</p> <p>[PropertyConceptDefinition = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) ]</p>

Attribute	Notes	Constraints and tags
		<p>for an entity, person, thing, function, procedure, activity, variable, or ]</p> <p>[<u>PropertyConceptDefinition_2 = r</u> body of data. ]</p> <p>[<u>PropertyConceptDefinitionSource = NCI</u> ]</p> <p>[<u>PropertyConceptPreferredName = Unique Identifier</u> ]</p> <p>[<u>PropertyQualifierConceptCode1 = C44272</u> ]</p> <p>[<u>PropertyQualifierConceptCode2 = C48294</u> ]</p> <p>[<u>PropertyQualifierConceptCode3 = C25627</u> ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information. ]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = Something referred to; the object of a reference. ]</p> <p>[<u>PropertyQualifierConceptDefinition3</u> = Occurring prior to something else. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1 = NCI</u> ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2 = NCI</u> ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource3 = NCI</u> ]</p> <p>[<u>PropertyQualifierConceptPreferredName1 = Annotation</u> ]</p> <p>[<u>PropertyQualifierConceptPreferredName2 = Reference Object</u> ]</p> <p>[<u>PropertyQualifierConceptPreferredName3 = Previous</u> ]</p>
<b>templateUid II</b> Private  [0..1]	A UID that references to an AIM template used to capture semantic meaning of pixel data, markup and calculation.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = A UID that references to an AIM template used to capture semantic meaning of pixel data, markup and calculation. ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = A UID that references to an AIM template used to capture semantic meaning of pixel data, markup and calculation. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C70663 ]</p> <p>[<u>PropertyConceptDefinition</u> = A set of characters used as a code that is</p>

Attribute	Notes	Constraints and tags
		<p>unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o ]</p> <p>[PropertyConceptDefinition_2 = r body of data. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Unique Identifier ]</p> <p>[PropertyQualifierConceptCode1 = C45677 ]</p> <p>[PropertyQualifierConceptDefinition1 = Something that establishes or serves as a pattern for reference; a form, mold, or pattern used as a guide to making something. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Template ]</p>

**Operations**

Method	Notes	Parameters
<b>SetImagingObservationEntityCollection()</b> void Public		<b>ImagingObservationEntity[]</b> [in] imagingObservationEntity
<b>GetImagingObservationEntityCollection()</b> ImagingObservationEntity[] Public		
<b>GetImagingPhysicalEntityCollection()</b> ImagingPhysicalEntity[] Public		
<b>SetImagingPhysicalEntityCollection()</b> void Public		<b>ImagingPhysicalEntity[]</b> [in] imagingPhysicalEntity
<b>GetCalculationEntityCollection()</b> CalculationEntity[] Public		
<b>SetCalculationEntityCollection()</b> void Public		<b>CalculationEntity[]</b> [in] calculationEntity
<b>GetComment()</b> ST	Free text about the annotation not intended for	

<b>Method</b>	<b>Notes</b>	<b>Parameters</b>
Public	rendering on the image.	
<b>GetDateTime()</b> TS Public	Date and Time (Julian) that the annotation was created	
<b>GetName()</b> ST Public	Human readable colloquial name of the annotation not guaranteed to be unique	
<b>GetTypeCode()</b> CD Public		
<b>SetComment()</b> void Public	Free text about the annotation not intended for rendering on the image.	<b>ST</b> [in] newVal
<b>SetDateTime()</b> void Public	Date and Time (Julian) that the annotation was created	<b>TS</b> [in] newVal
<b>SetName()</b> void Public	Human readable colloquial name of the annotation not guaranteed to be unique	<b>ST</b> [in] newVal
<b>SetTypeCode()</b> void Public		<b>CD</b> [in] newVal
<b>GetPrecedentReferencedAnnotationUid()</b> II Public	A Digital Imaging and Communication in Medicine (DICOM) (style) unique identifier for referencing earlier instance of AIM annotation.	
<b>SetPrecedentReferencedAnnotationUid()</b> void Public	A Digital Imaging and Communication in Medicine (DICOM) (style) unique identifier for referencing earlier instance of AIM annotation.	<b>II</b> [in] newVal
<b>GetInferenceEntityCollection()</b> InferenceEntity[] Public		
<b>GetTemplateUid()</b> II Public		
<b>SetInferenceEntityCollection()</b> void Public		<b>InferenceEntity[]</b> [in] inferenceEntity
<b>SetTemplateUid()</b> void Public		<b>II</b> [in] newVal
<b>GetAuditTrailCollection()</b> AuditTrail[] Public		
<b>SetAuditTrailCollection()</b> void Public		<b>AuditTrail[]</b> [in] auditTrail
<b>GetTaskContextEntityCollection()</b> TaskContextEntity[] Public		
<b>SetTaskContextEntity()</b> void Public		<b>TaskContextEntity[]</b> [in] taskContextEntity

Method	Notes	Parameters

### *AnnotationOfAnnotation*

**Type:** [Class](#) [AnnotationEntity](#)  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM **Keywords:**  
**Detail:** *Created on 11/9/2011. Last modified on 12/20/2011.*  
**GUID:** {C0D7FBF7-B5FA-45fb-BB2F-18CBD97648F8}

*AnnotationOfAnnotations* annotate other annotations (for example comparisons).

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Inherited.aimVersion.DE\_ID = 2750469.
- CADSR\_Inherited.aimVersion.DE\_VERSION = 1.0.
- CADSR\_Inherited.comment.OWNER REVIEWED = 1.
- CADSR\_Inherited.dateTime.OWNER REVIEWED = 1.
- CADSR\_Inherited.id.DE\_ID = 2750468.
- CADSR\_Inherited.id.DE\_VERSION = 1.0.
- CADSR\_Inherited.name.OWNER REVIEWED = 1.
- CADSR\_Inherited.precedentReferencedAnnotationUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.templateUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.typeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = *AnnotationOfAnnotations* annotate other annotations (for example comparisons)..
- ObjectClassConceptCode = C44272.
- ObjectClassConceptDefinition = An explanatory or critical comment that has been added to a text..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Annotation.

- ObjectClassQualifierConceptCode1 = C44272.
- ObjectClassQualifierConceptDefinition1 = An explanatory or critical comment that has been added to a text..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Annotation.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b><u>Association</u></b> Bi-Directional	Private annotationOfAnnotationCollection AnnotationOfAnnotationCollection	Private annotationOfAnnotations AnnotationOfAnnotation	
<b><u>Generalization</u></b> Source -> Destination	Public AnnotationOfAnnotation	Public AnnotationEntity	
<b><u>Association</u></b> Bi-Directional	Private annotationOfAnnotation AnnotationOfAnnotation	Private annotationOfAnnotationStatementCollection AnnotationStatement	
<b><u>Association</u></b> Bi-Directional	Private annotationOfAnnotation AnnotationOfAnnotation	Private adjudicationObservation AdjudicationObservation	

***Operations***

Method	Notes	Parameters
<b>GetAdjudicationObservation()</b> AdjudicationObservation Public		
<b>SetAdjudicationObservation() void</b> Public		<b>AdjudicationObservation [in]</b> adjudicationObservation
<b>GetAnnotationOfAnnotationStatementCollection()</b> AnnotationStatement[] Public		
<b>SetAnnotationOfAnnotationStatementCollection()</b>		<b>AnnotationStatement[] [in]</b> annotationStatement

Method	Notes	Parameters
void Public		

### *AnnotationRoleEntity*

*Type:*      **Class**    **Entity**

*Status:*      Proposed. Version 1.0. Phase 1.0.

*Package:*      AIM    *Keywords:*

*Detail:*      *Created on 11/9/2011. Last modified on 11/21/2012.*

*GUID:*      {D3857D7D-B0A8-4a92-87D8-43F84F496154}

Describes the role of referenced annotation.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = Describes the role of referenced annotation..
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = Describes the role of referenced annotation..
- ObjectClassConceptCode = C51070.
- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.
- ObjectClassQualifierConceptCode1 = C48835.
- ObjectClassQualifierConceptCode2 = C44272.
- ObjectClassQualifierConceptDefinition1 = The usual or expected function of something; the part something plays in an action or event..
- ObjectClassQualifierConceptDefinition2 = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Role.
- ObjectClassQualifierConceptPreferredName2 = Annotation.

- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private annotationEntity AnnotationEntity	Private annotationRoleEntityCo llection AnnotationRoleEntity	
<b>Generalization</b> Source -> Destination	Public AnnotationRoleEntity	Public Entity	

***Attributes***

Attribute	Notes	Constraints and tags
<b>roleCode</b> CD Private	Coded entry data used to describe or capture a role of annotation.	<p><i>Default:</i></p> <p>[CADSR_Description = Coded entry data used to describe or capture a role of annotation.]  [CURATOR REVIEWED = 1]  [description = Coded entry data used to describe or capture a role of annotation.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C93666]  [PropertyConceptDefinition = A coded value specifying the type of responsibility of an entity.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Role Code]</p>
<b>questionTypeCode</b> CD Private  [0..n]	questionTypeCode is used to collect coded entry data that describes the question being asked that is related to the typeCode attribute.	<p><i>Default:</i></p> <p>[CADSR_Description = questionTypeCode is used to collect coded entry data that describes the question being asked that is related to the typeCode attribute.]  [CURATOR REVIEWED = 1]  [description = questionTypeCode is used to collect coded entry data that describes the question being asked that is related to the typeCode attribute.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C93698]  [PropertyConceptDefinition = A coded value specifying an</p>

Attribute	Notes	Constraints and tags
		<p>identifiable class of an entity or activity based on common qualities.</p> <p>]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Type Code ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C41116 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = A sentence of inquiry that asks for a reply; a request for information (e.g., a formal request to a database or search engine). ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Question ]</p>
<b>roleSequenceNumber</b> INT Private	Reprerent ordering within the role.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = Represent ordering within the role. ]</p> <p>[<u>CADSR_VD_ID</u> = 2803195 ]</p> <p>[<u>CADSR_VD_VERSION</u> = 1.0 ]</p> <p>[<u>CURATOR_REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = Represent ordering within the role. ]</p> <p>[<u>OWNER_REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C25337 ]</p> <p>[<u>PropertyConceptDefinition</u> = A numeral or string of numerals expressing value, quantity, or identification. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Number ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C25673 ]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C48835 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = A serial arrangement in which things follow in logical order or a recurrent pattern. ]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = The usual or expected function of something; the part something plays in an action or event. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]</p>

Attribute	Notes	Constraints and tags
		[PropertyQualifierConceptPreferred Name1 = Sequence ] [PropertyQualifierConceptPreferred Name2 = Role ]

**Operations**

Method	Notes	Parameters
<b>GetRoleCode()</b> CD Public		
<b>GetRoleSequenceNumber</b> () INT Public	Reprerent ordering within the role.	
<b>SetRoleCode()</b> void Public		<b>CD</b> [in] newVal
<b>SetRoleSequenceNumber</b> () void Public	Reprerent ordering within the role.	<b>INT</b> [in] newVal
<b>GetQuestionTypeCode()</b> CD Public		
<b>SetQuestionTypeCode()</b> void Public		<b>CD</b> [in] newVal

***AnnotationCollection*****Type:** Class**Status:** Proposed. Version 1.0. Phase 1.0.**Package:** AIM      **Keywords:****Detail:** *Created on 11/9/2011. Last modified on 11/21/2012.***GUID:** {13912EB3-9DDD-4131-B69D-EE511491CEF2}

AIM 3.0 model does not support a collection concept. In AIM 3.0, each AIM annotation is stored as a single AIM XML document or AIM DICOM SR. A typical imaging study generates more than one AIM annotation. Managing AIM annotations of the same study becomes an extra activity that AIM implementers have to deal with. AIM 4.0 model has adopted an ability to store the same type of related AIM annotations into a single source. AIM has two types of annotations, image annotation and annotation of annotation. Image annotations annotate images. Annotation of annotations annotate other annotations, both image annotations and annotation of annotation. AIM 4.0, therefore, has a mechanism to manage collection of the same type of AIM annotations.

**It is an abstract concept of a container that collects the same type of annotation. An annotation captures information that can be described, measured, calculated and drawn on image(s) either from a human or machine observer.**

This abstract class is the parent of ImageAnnotationCollection and AnnotationofAnnotationCollection. It provides a general concept that AIM may contain one or more instance of the same type. It associates with two optional classes used to capture the information about a person or computer program generating AIM instances as well as the manufacturer's information of the software used to create AIM instances.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = This abstract class is the parent of ImageAnnotationCollection and AnnotationofAnnotationCollection. It provide a general concept that AIM may contain one or more instance of the same type..
- CURATOR REVIEWED = 1.
- documentation = This abstract class is the parent of ImageAnnotationCollection and AnnotationofAnnotationCollection. It provide a general concept that AIM may contain one or more instance of the same type..
- ObjectClassConceptCode = C101123.
- ObjectClassConceptDefinition = A set of annotations, or comments about an idea, subject or item..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Annotation Collection.
- OWNER REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private annotationCollection AnnotationCollection	Private equipment Equipment	
<b>Association</b> Bi-Directional	Private annotationCollection AnnotationCollection	Private user User	
<b>Generalization</b> Source -> Destination	Public ImageAnnotationCollection	Public AnnotationCollection	
<b>Generalization</b> Source -> Destination	Public AnnotationOfAnnotationCollection	Public AnnotationCollection	

**Attributes**

Attribute	Notes	Constraints and tags
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Attribute	Notes	Constraints and tags
<b>uniqueIdentifier</b> II Private	An identifier string that can either be a string representation of an OID, such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a specific annotation container.	<p><i>Default:</i></p> <p>[CADSR_Description = An identifier string that can either be a string representation of an OID, such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a specific annotation container.]  [CURATOR REVIEWED = 1]  [description = An identifier string that can either be a string representation of an OID, such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a specific annotation container.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C70663]  [PropertyConceptDefinition = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o]  [PropertyConceptDefinition_2 = r body of data.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Unique Identifier]</p>
<b>aimVersion</b> AimVersion Private	The version of the AIM model used by this annotation.	<p><i>Default:</i></p> <p>[CADSR_Description = The version of the AIM model used by this annotation.]  [CADSR_VD_ID = 3423518]  [CADSR_VD_VERSION = 1.0]  [CURATOR REVIEWED = 1]  [description = The version of the AIM model used by this annotation.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C25714]  [PropertyConceptDefinition = A form or variant of a type or original; one of a sequence of copies of a program, each incorporating new modifications.]  [PropertyConceptDefinitionSource = NCI]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyConceptPreferredName = Version ]  [PropertyQualifierConceptCode1 = C16866 ]  [PropertyQualifierConceptDefinition1 = A representation of something, often idealized or modified to make it conceptually easier to understand. ]  [PropertyQualifierConceptDefinitionSource1 = NCI ]  [PropertyQualifierConceptPreferredName1 = Model ]</p>
<b>description</b> ST Private  [0..1]	Free text describing the content of Annotations, and is not intended for rendering.	<p><i>Default:</i></p> <p>[CADSR_Description = Free text describing the content of Annotations, and is not intended for rendering. ]  [CURATOR REVIEWED = 1 ]  [description = Free text describing the content of Annotations, and is not intended for rendering. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25365 ]  [PropertyConceptDefinition = A written or verbal account, representation, statement, or explanation of something. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Description ]</p>
<b>dateTime</b> TS Private	Date and Time (Julian) that the annotation was created.	<p><i>Default:</i></p> <p>[CADSR_Description = Date and Time (Julian) that the annotation was created. ]  [CURATOR REVIEWED = 1 ]  [description = Date and Time (Julian) that the annotation was created. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C37939 ]  [PropertyConceptDefinition = An expression of both date and time that an event has happened or will happen. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Date and Time ]</p>

Attribute	Notes	Constraints and tags

**Operations**

Method	Notes	Parameters
<b>GetDescription()</b> ST Public		
<b>GetUniqueIdentifier()</b> II Public	An identifier string that can either be a string representation of an OID, such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a specific annotation container.	
<b>SetDescription()</b> void Public		<b>ST</b> [in] newVal
<b>SetUniqueIdentifier()</b> void Public	An identifier string that can either be a string representation of an OID, such as a DICOM (style) unique identifier or UUID. It is used to uniquely reference a specific annotation container.	<b>II</b> [in] newVal
<b>GetAimVersion()</b> AimVersion Public	The version of the AIM model used by this annotation.	
<b>SetAimVersion()</b> void Public	The version of the AIM model used by this annotation.	<b>AimVersion</b> [in] aimVersion
<b>GetDateTime()</b> TS Public	Date and Time (Julian) that the annotation was created.	
<b>SetDateTime()</b> void Public	Date and Time (Julian) that the annotation was created.	<b>TS</b> [in] newVal
<b> GetUser()</b> User Public		
<b> SetUser()</b> void Public		<b>User</b> [in] user
<b> GetEquipment()</b> Equipment Public		
<b> SetEquipment()</b> void Public		<b>Equipment</b> [in] equipment

## *AuditTrail*

Type:	Class
Status:	Proposed. Version 1.0. Phase 1.0.
Package:	AIM
Detail:	Keywords: <i>Created on 11/9/2011. Last modified on 11/21/2012.</i>
GUID:	{12421334-14EC-4d63-82ED-3EF4F04BC207}

It is used to capture any activity, in coded terms , that requires an entry in the audit trail, including general and time point lesion observations, time point observations, etc.

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = It is used to capture any activity, in coded terms , that requires an entry in the audit trail, including general and time point lesion observations, time point observations, etc..
- CURATOR\_REVIEWS = 1.
- documentation = It is used to capture any activity, in coded terms , that requires an entry in the audit trail, including general and time point lesion observations, time point observations, etc..
- ObjectClassConceptCode = C54625.
- ObjectClassConceptDefinition = The aggregate of past events; the continuum of events occurring in succession leading from the past to the present; a record or narrative description of past events..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = History.
- ObjectClassQualifierConceptCode1 = C45269.
- ObjectClassQualifierConceptDefinition1 = A methodical examination or review of a condition or situation..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Audit.
- OWNER\_REVIEWS = 1.

### Connections

Connector	Source	Target	Notes
<u>Association</u> Bi-Directional	Private annotationEntity AnnotationEntity	Private auditTrailCollection AuditTrail	

***Attributes***

Attribute	Notes	Constraints and tags
<b>statusCode</b> CD Private	Coded entry data used to describe or capture the type of an AIM status, e.g. preliminary, final, addendum, etc.	<p><i>Default:</i></p> <p>[CADSR_Description = Coded entry data used to describe or capture the type of an AIM status, e.g. preliminary, final, addendum, etc.]</p> <p>[CURATOR_REVIEWED = 1]</p> <p>[description = Coded entry data used to describe or capture the type of an AIM status, e.g. preliminary, final, addendum, etc.]</p> <p>[OWNER_REVIEWED = 1]</p> <p>[PropertyConceptCode = C25162]</p> <p>[PropertyConceptDefinition = A symbol or combination of symbols which is given an arbitrary meaning within a systematized collection of concepts used for data representation.]</p> <p>[PropertyConceptDefinitionSource = NCI]</p> <p>[PropertyConceptPreferredName = Code]</p> <p>[PropertyQualifierConceptCode1 = C25688]</p> <p>[PropertyQualifierConceptDefinition1 = A condition or state at a particular time.]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI]</p> <p>[PropertyQualifierConceptPreferredName1 = Status]</p>
<b>dateTime</b> TS Private	Date and time when an audit trail was created.	<p><i>Default:</i></p> <p>[CADSR_Description = Date and time when an audit trail was created.]</p> <p>[CURATOR_REVIEWED = 1]</p> <p>[description = Date and time when an audit trail was created.]</p> <p>[OWNER_REVIEWED = 1]</p> <p>[PropertyConceptCode = C37939]</p> <p>[PropertyConceptDefinition = An expression of both date and time that an event has happened or will happen.]</p> <p>[PropertyConceptDefinitionSource = NCI]</p> <p>[PropertyConceptPreferredName = Date and Time]</p>

Attribute	Notes	Constraints and tags
<b>changeReason</b> CD Private	Provides reasons for edit or modification reasons.	<i>Default:</i>  <u>CADSR_Description</u> = Provides reasons for edit or observation modification reasons. ] <u>CURATOR REVIEWED</u> = 1 ] <u>description</u> = Provides reasons for edit or observation modification reasons. ] <u>OWNER REVIEWED</u> = 1 ] <u>PropertyConceptCode</u> = C93529 ] <u>PropertyConceptDefinition</u> = The rationale for why an entity or event is changed. ] <u>PropertyConceptDefinitionSource</u> = NCI ] <u>PropertyConceptPreferredName</u> = Change Reason ]
<b>worklistSubtaskUid</b> II Private  [0..1]	Provides a reference to the sub-task (and parent task) information for the sub-task in which the observation was created.	<i>Default:</i>  <u>CADSR_Description</u> = Provides a reference to the sub-task (and parent task) information for the sub-task in which the observation was created. ] <u>CURATOR REVIEWED</u> = 1 ] <u>description</u> = Provides a reference to the sub-task (and parent task) information for the sub-task in which the observation was created. ] <u>OWNER REVIEWED</u> = 1 ] <u>PropertyConceptCode</u> = C70663 ] <u>PropertyConceptDefinition</u> = A set of characters used as a code that is unique in the context or the system for which it is created. It serves as a means of identification and reference (often instead of a name) for an entity, person, thing, function, procedure, activity, variable, o ] <u>PropertyConceptDefinition_2</u> = r body of data. ] <u>PropertyConceptDefinitionSource</u> = NCI ] <u>PropertyConceptPreferredName</u> = Unique Identifier ]

Attribute	Notes	Constraints and tags
		<p>[PropertyQualifierConceptCode1 = C101129 ]  [PropertyQualifierConceptCode2 = C90504 ]  [PropertyQualifierConceptCode3 = C101124 ]  [PropertyQualifierConceptDefinition1 = An assigned piece of work, usually with a time allotment. ]  [PropertyQualifierConceptDefinition2 = Lower in rank or importance, or dependent on something else. ]  [PropertyQualifierConceptDefinition3 = A collection of activities or pieces of work that are generally assigned to an individual or machine to perform. ]  [PropertyQualifierConceptDefinitionSource1 = NCI ]  [PropertyQualifierConceptDefinitionSource2 = NCI ]  [PropertyQualifierConceptDefinitionSource3 = NCI ]  [PropertyQualifierConceptPreferredName1 = Task ]  [PropertyQualifierConceptPreferredName2 = Subordinate ]  [PropertyQualifierConceptPreferredName3 = Worklist ]</p>
<b>comment</b> ST Private  [0..1]	Provides comments about the edit or modification.	<p><i>Default:</i></p> <p>[CADSR_Description = Provides comments about the edit or observation modification. ]  [CURATOR REVIEWED = 1 ]  [description = Provides comments about the edit or observation modification. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25393 ]  [PropertyConceptDefinition = A written explanation, observation or criticism added to textual material. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Comment ]</p>

### *Operations*

Method	Notes	Parameters
GetStatusCode() CD	Coded entry data used to describe or capture a	

<b>Method</b>	<b>Notes</b>	<b>Parameters</b>
Public	type of an AIM status.	
<b>SetStatusCode()</b> void Public	Coded entry data used to describe or capture a type of an AIM status.	<b>CD</b> [in] newVal
<b>GetWorklistSubtaskUid()</b> II Public	Provides a reference to the sub-task (and parent task) information for the sub-task in which the observation was created.	
<b>SetWorklistSubtaskUid()</b> void Public	Provides a reference to the sub-task (and parent task) information for the sub-task in which the observation was created.	<b>II</b> [in] newVal
<b>GetChangeReason()</b> CD Public	Provides reasons for edit or modification reasons.	
<b>GetComment()</b> ST Public	Provides comments about the edit or modification.	
<b>SetChangeReason()</b> void Public	Provides reasons for edit or modification reasons.	<b>CD</b> [in] newVal
<b>SetComment()</b> void Public	Provides comments about the edit or modification.	<b>ST</b> [in] newVal
<b>GetDateTime()</b> TS Public		
<b>SetDateTime()</b> void Public		<b>TS</b> [in] newVal

### *CalculationEntity*

**Type:** Class    Entity  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM    **Keywords:**  
**Detail:** *Created on 11/9/2011. Last modified on 11/23/2011.*  
**GUID:** {B251FC7E-6228-464c-AAFC-2209708A49B6}

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = Calculations performed on annotations..
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.

- documentation = Calculations performed on annotations..
- ObjectClassConceptCode = C54125.
- ObjectClassConceptDefinition = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Calculation.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private annotationEntity AnnotationEntity	Private calculationEntityCollect ion CalculationEntity	
<b>Association</b> Source -> Destination	Private calculationEntity CalculationEntity	Private algorithm Algorithm	
<b>Association</b> Source -> Destination	Private calculationEntity CalculationEntity	Private calculationResultCollect ion CalculationResult	
<b>Generalization</b> Source -> Destination	Public CalculationEntity	Public Entity	

***Attributes***

Attribute	Notes	Constraints and tags
<b>typeCode</b> CD Private  [1..n]	Coded entry data used to describe or capture a calculation.	<i>Default:</i>  [ <u>CADSR_Description</u> = Coded entry data used to describe or capture a calculation. ] [ <u>CURATOR REVIEWED</u> = 1 ] [ <u>description</u> = Coded entry data used to describe or capture a calculation. ] [ <u>OWNER REVIEWED</u> = 1 ] [ <u>PropertyConceptCode</u> = C93698 ] [ <u>PropertyConceptDefinition</u> = A coded value specifying an identifiable class of an entity or activity based on common qualities. ]

Attribute	Notes	Constraints and tags
		<p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Type Code ]</p>
<b>questionTypeCode</b> CD Private [0..n]	questionTypeCode is used to collect coded entry data that describes the question being asked that is related to the typeCode attribute.	<p><i>Default:</i></p> <p>[CADSR_Description = questionTypeCode is used to collect coded entry data that describes the question being asked that is related to the typeCode attribute.]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[description = questionTypeCode is used to collect coded entry data that describes the question being asked that is related to the typeCode attribute.]</p> <p>[OWNER REVIEWED = 1]</p> <p>[PropertyConceptCode = C93698]</p> <p>[PropertyConceptDefinition = A coded value specifying an identifiable class of an entity or activity based on common qualities.]</p> <p>[PropertyConceptDefinitionSource = NCI]</p> <p>[PropertyConceptPreferredName = Type Code]</p> <p>[PropertyQualifierConceptCode1 = C41116]</p> <p>[PropertyQualifierConceptDefinition1 = A sentence of inquiry that asks for a reply; a request for information (e.g., a formal request to a database or search engine).]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI]</p> <p>[PropertyQualifierConceptPreferredName1 = Question]</p>
<b>description</b> ST Private	A human understandable, brief description of the calculation.	<p><i>Default:</i></p> <p>[CADSR_Description = A human understandable, brief description of the calculation.]</p> <p>[CADSR_VD_ID = 2803207]</p> <p>[CADSR_VD_VERSION = 1.0]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[description = A human understandable, brief description of</p>

Attribute	Notes	Constraints and tags
		<p>the calculation. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C25365 ]</p> <p>[<u>PropertyConceptDefinition</u> = A written or verbal account, representation, statement, or explanation of something. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Description ]</p>
<b>mathML</b> ST Private [0..1]	An optional mathML representation of the calculation.	<p><i>Default:</i></p> <p>[<u>CADSR Description</u> = An optional mathML representaion of the calculation. ]</p> <p>[<u>CADSR_VD_ID</u> = 2803207 ]</p> <p>[<u>CADSR_VD_VERSION</u> = 1.0 ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = An optional mathML representaion of the calculation. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C71609 ]</p> <p>[<u>PropertyConceptDefinition</u> = An application of XML for describing mathematical notations and capturing both its structure and content. It aims at integrating mathematical formulae into World Wide Web documents. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Mathematical Markup Language ]</p>
<b>questionIndex</b> INT Private [0..1]	It is used to store an index value that identifies the order of the question in an AIM Template.	<p><i>Default:</i></p> <p>[<u>CADSR Description</u> = It is used to store an index value that identifies the order of the question in an AIM Template. ]</p> <p>[<u>CADSR_VD_ID</u> = 2803195 ]</p> <p>[<u>CADSR_VD_VERSION</u> = 1.0 ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C25390 ]</p> <p>[<u>PropertyConceptDefinition</u> = A numerical scale used to compare variables with one another or with some reference number; a number used to select an element of a list, vector, array or other sequence. ]</p> <p>[<u>PropertyConceptDefinitionSource</u></p>

Attribute	Notes	Constraints and tags
		= NCI ] [PropertyConceptPreferredName = Index ] [PropertyQualifierConceptCode1 = C41116 ] [PropertyQualifierConceptDefinition1 = A sentence of inquiry that asks for a reply; a request for information (e.g., a formal request to a database or search engine). ] [PropertyQualifierConceptDefinitionSource1 = NCI ] [PropertyQualifierConceptPreferredName1 = Question ]

***Operations***

Method	Notes	Parameters
<b>SetCalculationResultCollection()</b> void Public		<b>CalculationResult[]</b> [in] calculationResult
<b>GetDescription()</b> ST Public	A human understandable, brief description of the calculation.	
<b>SetDescription()</b> void Public	A human understandable, brief description of the calculation.	<b>ST</b> [in] newVal
<b>GetMathML()</b> ST Public	An optional mathMLrepresentaion of the calculation.	
<b>SetMathML()</b> void Public	An optional mathMLrepresentaion of the calculation.	<b>ST</b> [in] newVal
<b>GetQuestionTypeCode()</b> CD Public	questionTypeCode is used to collect coded entry data that describes the question being asked that is related to the typeCode attribute.	
<b>GetTypeCode()</b> CD Public	Coded entry data used to describe or capture a calculation.	
<b>SetQuestionTypeCode()</b> void Public	questionTypeCode is used to collect coded entry data that describes the question being asked that is related to the typeCode attribute.	<b>CD</b> [in] newVal
<b>GetQuestionIndex()</b> INT Public	It is used to store an index value that identifies the order of the question in an AIM Template.	
<b>SetTypeCode()</b> void Public	Coded entry data used to describe or capture a calculation.	<b>CD</b> [in] newVal
<b>SetQuestionIndex()</b> void Public	It is used to store an index value that identifies the order of the question in an AIM Template.	<b>INT</b> [in] newVal

Method	Notes	Parameters
<b>GetAlgorithm()</b> Algorithm Public		
<b>SetAlgorithm()</b> void Public		<b>Algorithm</b> [in] algorithm
<b>GetCalculationResultCollection()</b> CalculationResult[] Public		

### *CalculationData*

*Type:*            **Class**

*Status:*        Proposed. Version 1.0. Phase 1.0.

*Package:*      AIM      *Keywords:*

*Detail:*          *Created on 11/9/2011. Last modified on 11/9/2011.*

*GUID:*          {0E04353B-CF0C-47a2-B062-1B638FE26F73}

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = Store a calculation result..
- CURATOR REVIEWED = 1.
- documentation = Container for a single numeric calculation result..
- documentation = Store a result..
- ObjectClassConceptCode = C25474.
- ObjectClassConceptDefinition = A collection or single item of factual information, derived from measurement or research, from which conclusions may be drawn..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Data.
- ObjectClassQualifierConceptCode1 = C54125.
- ObjectClassQualifierConceptDefinition1 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Calculation.

- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Association</b> Source -> Destination	Private calculationData CalculationData	Private coordinateCollection Coordinate	
<b>Association</b> Source -> Destination	Private calculationResult ExtendedCalculationRe sult	Private calculationDataCollecti on CalculationData	

***Attributes***

Attribute	Notes	Constraints and tags
<b>value</b> ST Private	The data of the result.	<p><i>Default:</i></p> <p>[CADSR_Description = A numeric value of a calculation result.]  [CURATOR REVIEWED = 1]  [description = A numeric value of a calculation result.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C25712]  [PropertyConceptDefinition = A numerical quantity measured or assigned or computed.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Value]</p>

***Operations***

Method	Notes	Parameters
<b>GetCoordinateCollection(</b> ) Coordinate[] Public		
<b>GetValue()</b> ST Public	The data of the result.	
<b>SetCoordinateCollection(</b> ) void Public		Coordinate[] [in] ordinate
<b>SetValue()</b> void Public	The data of the result.	ST [in] newVal

## *CalculationResult*

Type:	Class
Status:	Proposed. Version 1.0. Phase 1.0.
Package:	AIM
Detail:	Keywords: <i>Created on 11/9/2011. Last modified on 1/2/2013.</i>
GUID:	{A8E355E5-5CA8-4379-B7EB-6D093F47258D}

Base class of calculation result.

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = Base class of calculation result..
- CURATOR REVIEWED = 1.
- documentation = Base class of calculation result..
- OWNER REVIEWED = 1.

### Connections

Connector	Source	Target	Notes
<b>Association</b> Source -> Destination	Private calculationEntity CalculationEntity	Private calculationResultCollection CalculationResult	
<b>Generalization</b> Source -> Destination	Public ExtendedCalculationResult	Public CalculationResult	
<b>Generalization</b> Source -> Destination	Public CompactCalculationResult	Public CalculationResult	
<b>Association</b> Source -> Destination	Private calculationResult CalculationResult	Private dimensionCollection Dimension	

### Attributes

Attribute	Notes	Constraints and tags
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Attribute	Notes	Constraints and tags
<b>type</b> CalculationResultIdentifier Private	The type of result, that is binary, scalar, vector, histogram, array, histogram, uri or matrix.	<p><i>Default:</i></p> <p>[CADSR_DE_ID = 2753195 ]  [<u>CADSR_DE_VERSION</u> = 3.0 ]  [<u>CADSR_Description</u> = The type of result, that is binary, scalar, vector, histogram, array, histogram, uri or matrix. ]  [<u>CURATOR_REVIEWED</u> = 1 ]  [<u>description</u> = The type of result, that is binary, scalar, vector, histogram, array, histogram, uri or matrix. ]  [<u>OWNER_REVIEWED</u> = 1 ]</p>
<b>unitOfMeasure</b> ST Private	A string representation of UCUM unit for the value of the calculation.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = A string representation of UCUM unit for the value of the calculation. ]  [<u>CADSR_VD_ID</u> = 2803207 ]  [<u>CADSR_VD_VERSION</u> = 1.0 ]  [<u>CURATOR_REVIEWED</u> = 1 ]  [<u>description</u> = A string representation of UCUM unit for the value of the calculation. ]  [<u>OWNER_REVIEWED</u> = 1 ]  [<u>PropertyConceptCode</u> = C25709 ]  [<u>PropertyConceptDefinition</u> = A named quantity in terms of which other quantities are measured or specified, used as a standard measurement of like kinds. ]  [<u>PropertyConceptDefinitionSource</u> = NCI ]  [<u>PropertyConceptPreferredName</u> = Unit of Measure ]</p>
<b>dataType</b> CD Private	Coded entry data used to describe or capture a type of parameter. Coded data type can be a primitive programming data type such as integer, double, etc. as well as other data type such as URI.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = Coded entry data used to describe or capture a type of parameter. Coded data type can be a primitive programming data type such as integer, double, etc. as well as other data type such as URI. ]  [<u>CURATOR_REVIEWED</u> = 1 ]  [<u>description</u> = Coded entry data used to describe or capture a type of parameter. Coded data type can be a primitive programming data type such as integer, double, etc. as well as other data type such as URI. ]</p>

Attribute	Notes	Constraints and tags
		[OWNER REVIEWED = 1 ] [PropertyConceptCode = C42645 ] [PropertyConceptDefinition = An indication of the form that a value will have. Examples include string, integer, and character. ] [PropertyConceptDefinitionSource = NCI ] [PropertyConceptPreferredName = Data Type ]

**Operations**

Method	Notes	Parameters
<b>GetType()</b> ST Public		
<b>SetType()</b> void Public		<b>ST</b> [in] newVal
<b>GetUnitOfMeasure()</b> ST Public		
<b>SetUnitOfMeasure()</b> void Public		<b>ST</b> [in] newVal
<b>GetDataType()</b> CD Public	Coded entry data used to describe or capture a type of parameter. Coded data type can be a primitive programming data type such as integer, double, etc. as well as other data type such as URI.	
<b>SetDataType()</b> void Public	Coded entry data used to describe or capture a type of parameter. Coded data type can be a primitive programming data type such as integer, double, etc. as well as other data type such as URI.	<b>CD</b> [in] newVal
<b>SetDimensionCollection()</b> void Public		<b>Dimension[]</b> [in] dimension
<b>GetDimensionCollection( )</b> Dimension[] Public		

***CharacteristicQuantification***

**Type:** **Class**  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM      **Keywords:**  
**Detail:** Created on 11/9/2011. Last modified on 1/2/2013.  
**GUID:** {092E4641-7C4B-4c3e-8799-3C1D82A55C4B}

### ***Custom Properties***

- isActive = False

### ***Tagged Values***

- CADSR\_Description = It is the act of measuring that maps human sense or machine observations and experiences into members of some set of numbers or a coded concept (e.g. R-404FA, Mild, SRT; R-400F9, Not Applicable, SRT). A concept (e.g. , "severity" ) and numerical value as.
- CADSR\_Description2 = associated with the concept. In some cases, a concept may mapped to a nonquantifiable value such as none, mild avid or indeterminate..
- CURATOR\_REVIEWED = 1.
- documentation = It is the act of measuring that maps human sense observations and experiences into members of some set of numbers or a coded concept (e.g. R-404FA, Mild, SRT; R-400F9, Not Applicable, SRT)..
- ObjectClassConceptCode = C48937.
- ObjectClassConceptDefinition = The act of measuring or estimating a quantity..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Quantitation.
- ObjectClassQualifierConceptCode1 = C25447.
- ObjectClassQualifierConceptDefinition1 = The distinguishing qualities or prominent aspect of a person, object, action, process, or substance..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Characteristic.
- OWNER\_REVIEWED = 1.

### ***Connections***

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private imagingPhysicalEntity Characteristic ImagingPhysicalEntity Characteristic	Private characteristicQuantificationCollection CharacteristicQuantification	
<b>Association</b> Bi-Directional	Private imagingObservationCharacteristic ImagingObservationCharacteristic	Private characteristicQuantificationCollection CharacteristicQuantification	

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public Scale	Public CharacteristicQuantification	
<b>Generalization</b> Source -> Destination	Public NonQuantifiable	Public CharacteristicQuantification	
<b>Generalization</b> Source -> Destination	Public Numerical	Public CharacteristicQuantification	
<b>Generalization</b> Source -> Destination	Public Interval	Public CharacteristicQuantification	
<b>Generalization</b> Source -> Destination	Public Quantile	Public CharacteristicQuantification	

**Attributes**

Attribute	Notes	Constraints and tags
<b>annotatorConfidence</b> REAL Private  [0..1]	A real number, between 0 and 1, indicating annotator's confidence that a characteristic quantification is present.	<p><i>Default:</i></p> <p>[CADCSDR_Description = A real number, between 0 and 1, indicating annotator's confidence that a characteristic quantification is present.]</p> <p>[CURATOR_REVIEWED = 1 ]</p> <p>[description = A real number, between 0 and 1, indicating annotator's confidence that a characteristic quantification is present.]</p> <p>[OWNER_REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C49020 ]</p> <p>[PropertyConceptDefinition = The statistical calculation of the percentage likelihood for a given set of data to have a given statistical value.]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Statistical Confidence ]</p> <p>[PropertyQualifierConceptCode1 = C69245 ]</p> <p>[PropertyQualifierConceptDefinition1 = The name of the individual witnessing an event.]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Person Observer ]</p>
<b>characteristicQuantificationIndex</b> INT Private [0..1]	It is used to store an index value that identifies the order of each possible answer in quantification collection.	<p><i>Default:</i></p> <p>[CADSR_Description] = It is used to store an index value that identifies the order of each possible answer in quantification collection. ]</p> <p>[CADSR_VD_ID] = 2803195 ]</p> <p>[CADSR_VD_VERSION] = 1.0 ]</p> <p>[CURATOR REVIEWED] = 1 ]</p> <p>[description] = It is used to store an index value that identifies the order of each possible answer in quantification collection. ]</p> <p>[OWNER REVIEWED] = 1 ]</p> <p>[PropertyConceptCode] = C25390 ]</p> <p>[PropertyConceptDefinition] = A numerical scale used to compare variables with one another or with some reference number; a number used to select an element of a list, vector, array or other sequence. ]</p> <p>[PropertyConceptDefinitionSource] = NCI ]</p> <p>[PropertyConceptPreferredName] = Index ]</p> <p>[PropertyQualifierConceptCode1] = C48937 ]</p> <p>[PropertyQualifierConceptCode2] = C25447 ]</p> <p>[PropertyQualifierConceptDefinition1] = The act of measuring or estimating a quantity. ]</p> <p>[PropertyQualifierConceptDefinition2] = The distinguishing qualities or prominent aspect of a person, object, action, process, or substance. ]</p> <p>[PropertyQualifierConceptDefinitionSource1] = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2] = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1] = Quantitation ]</p> <p>[PropertyQualifierConceptPreferredName2] = Characteristic ]</p>

Attribute	Notes	Constraints and tags
<b>label</b> ST Private	A human readable description of the characteristic quantification.	<p><i>Default:</i></p> <p>[CADSR_Description = A human readable description of the characteristic quantification.]  [CURATOR REVIEWED = 1]  [description = A human readable description of the characteristic quantification.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C45561]  [PropertyConceptDefinition = A brief description given for purposes of identification; an identifying or descriptive marker that is attached to an object.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Label]</p>
<b>valueLabel</b> ST Private  [0..1]	A value that associates with the label.	<p><i>Default:</i></p> <p>[CADSR_Description = A value that associates with the label.]  [description = A value that associates with the label.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C45561]  [PropertyConceptDefinition = A brief description given for purposes of identification; an identifying or descriptive marker that is attached to an object.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Label]  [PropertyQualifierConceptCode1 = C25712]  [PropertyQualifierConceptDefinition1 = A numerical quantity measured or assigned or computed.]  [PropertyQualifierConceptDefinitionSource1 = NCI]  [PropertyQualifierConceptPreferredName1 = Value]</p>

Attribute	Notes	Constraints and tags
<b>valueDescription</b> ST Private [0..1]	A human readable description.	<p><i>Default:</i></p> <p>[CADSR_Description = A human readable description.]  [description = A human readable description.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C25365]  [PropertyConceptDefinition = A written or verbal account, representation, statement, or explanation of something.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Description]  [PropertyQualifierConceptCode1 = C25712]  [PropertyQualifierConceptDefinition1 = A numerical quantity measured or assigned or computed.]  [PropertyQualifierConceptDefinitionSource1 = NCI]  [PropertyQualifierConceptPreferredName1 = Value]</p>
<b>comment</b> ST Private [0..1]	Free text comment.	<p><i>Default:</i></p> <p>[CADSR_Description = Free text comment.]  [description = Free text comment.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C25393]  [PropertyConceptDefinition = A written explanation, observation or criticism added to textual material.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Comment]</p>

**Operations**

Method	Notes	Parameters
<b>GetAnnotatorConfidence()</b> REAL Public	A real number, between 0 and 1, indicating annotator's confidence that a characteristic quantification is present.	
<b>GetCharacteristicQuantificationIndex()</b> INT Public	It is used to store an index value that identifies the order of each possible answer in quantification collection.	
<b>GetLabel()</b> ST Public	A human readable description of the characteristic quantification.	

Method	Notes	Parameters
<b>SetAnnotatorConfidence()</b> void Public	A real number, between 0 and 1, indicating annotator's confidence that a characteristic quantification is present.	<b>REAL</b> [in] newVal
<b>SetCharacteristicQuantificationIndex()</b> void Public	It is used to store an index value that identifies the order of each possible answer in quantification collection.	<b>INT</b> [in] newVal
<b>SetLabel()</b> void Public	A human readable description of the characteristic quantification.	<b>ST</b> [in] newVal
<b>GetComment()</b> ST Public	Free text comment.	
<b>SetComment()</b> void Public	Free text comment.	<b>ST</b> [in] newVal
<b>GetValueDescription()</b> ST Public	A human readable description.	
<b>SetValueDescription()</b> void Public	A human readable description.	<b>ST</b> [in] newVal
<b>GetValueLabel()</b> ST Public	A value that associates with the label.	
<b>SetValueLabel()</b> void Public	A value that associates with the label.	<b>ST</b> [in] newVal

### *TwoDimensionCircle*

**Type:**           **Class**     **TwoDimensionGeometricShapeEntity**  
**Status:**       Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM       **Keywords:**  
**Detail:**        Created on 11/9/2011. Last modified on 3/15/2012.  
**GUID:**        {7C3BD296-7B7E-42d3-83B7-E8EB15D604AC}

A circle defined by two (column, row) pairs. The first point is the central pixel. The second point is a pixel on the perimeter of the circle.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = A circle is defined by two pairs of coordinates. The first coordinate is the central pixel. The second coordinate is a pixel on the perimeter of the circle..
- CADSR\_Inherited.comment.OWNER REVIEWED = 1.
- CADSR\_Inherited.description.OWNER REVIEWED = 1.

- CADSR\_Inherited.imageReferenceUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.VD\_ID = 2803169.
- CADSR\_Inherited.includeFlag.VD\_VERSION = 1.0.
- CADSR\_Inherited.interpolationMethod.OWNER REVIEWED = 1.
- CADSR\_Inherited.label.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.VD\_ID = 2803207.
- CADSR\_Inherited.lineColor.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineOpacity.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineOpacity.VD\_ID = 2803207.
- CADSR\_Inherited.lineOpacity.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineStyle.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineStyle.VD\_ID = 2803207.
- CADSR\_Inherited.lineStyle.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineThickness.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineThickness.VD\_ID = 2803207.
- CADSR\_Inherited.lineThickness.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.questionIndex.VD\_ID = 2803195.
- CADSR\_Inherited.questionIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionTypeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.referencedFrameNumber.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.VD\_ID = 2803195.
- CADSR\_Inherited.shapeIdentifier.VD\_VERSION = 1.0.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.Uri.OWNER REVIEWED = 1.

- CADSR\_Inherited.uri.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = A circle is defined by two pairs of coordinates. The first coordinate is the central pixel. The second coordinate is a pixel on the perimeter of the circle..
- ObjectClassConceptCode = C45789.
- ObjectClassConceptDefinition = A ring-shaped structure with every point equidistant from the center..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Circle.
- ObjectClassQualifierConceptCode1 = C48282.
- ObjectClassQualifierConceptDefinition1 = The property of being measured and described using two orthogonal directions..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = 2-Dimensional.
- OWNER REVIEWED = 1.

#### *Connections*

Connector	Source	Target	Notes
<u>Generalization</u> Source -> Destination	Public TwoDimensionCircle	Public TwoDimensionGeometricShapeEntity	

#### *CompactCalculationResult*

Type:	<b>Class</b>	<b>CalculationResult</b>
Status:	Proposed.	Version 1.0. Phase 1.0.
Package:	AIM	<b>Keywords:</b>
Detail:	Created on 11/9/2011. Last modified on 1/2/2013.	
GUID:	{7209B00F-1B10-4725-8B76-CE6AEA541C2A}	

The result of a calculation captured in a string format. The type attribute of the base class defines what kind of data format the string is captured as.

A string value of a calculation and its type is determined by the type attribute in this class, which inherits from CalculationResult class. A type can be an array, binary, histogram, matrix, scalar, uri and vector. An encoding method is used to applied to the content of the value attribute. A compression method can be used to compress the content in value attribute in order to reduce the size of the value attribute.

#### Custom Properties

***Custom Properties***

- isActive = False

***Tagged Values***

- CADSR\_Description = The result of a calculation captured in a string format. The type attribute of the base class defines what kind of data format the string is captured as..
- CADSR\_Inherited.dataType.OWNER REVIEWED = 1.
- CADSR\_Inherited.type.OWNER REVIEWED = 1.
- CADSR\_Inherited.unitOfMeasure.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = The result of a calculation captured in a string format. The type attribute of the base class defines what kind of data format the string is captured as..
- ObjectClassConceptCode = C20200.
- ObjectClassConceptDefinition = The result of an action..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Outcome.
- ObjectClassQualifierConceptCode1 = C54125.
- ObjectClassQualifierConceptCode2 = C64347.
- ObjectClassQualifierConceptDefinition1 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinition2 = The coding of data to save storage space or transmission time..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Calculation.
- ObjectClassQualifierConceptPreferredName2 = Data Compression.
- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public CompactCalculationResult	Public CalculationResult	

***Attributes***

Attribute	Notes	Constraints and tags
<b>value</b> ST Private	String value of a calculation. Its actual type is determined by the type attribute in this class, which inherits from CalculationResult class. It can hold a value of array, binary, histogram, matrix, scalar, uri and vector.	<i>Default:</i>  <code>[CADSR_Description = String value of a calculation. Its actual type is determined by the type attribute in this class, which inherits from CalculationResult class. It can hold a value of array, binary, histogram, matrix, scalar, uri and vector.]</code> <code>[CURATOR REVIEWED = 1]</code> <code>[description = String value of a calculation. Its actual type is determined by the type attribute in this class, which inherits from CalculationResult class. It can hold a value of array, binary, histogram, matrix, scalar, uri and vector.]</code> <code>[OWNER REVIEWED = 1]</code> <code>[PropertyConceptCode = C25712]</code> <code>[PropertyConceptDefinition = A numerical quantity measured or assigned or computed.]</code> <code>[PropertyConceptDefinitionSource = NCI]</code> <code>[PropertyConceptPreferredName = Value]</code>
<b>encoding</b> CD Private  [0..1]	Encoding method applied to the content of the value attribute.	<i>Default:</i>  <code>[CADSR_Description = Encoding method applied to the content of the value attribute.]</code> <code>[CURATOR REVIEWED = 1]</code> <code>[description = Encoding method applied to the content of the value attribute.]</code> <code>[OWNER REVIEWED = 1]</code> <code>[PropertyConceptCode = C80216]</code> <code>[PropertyConceptDefinition = To assign a code to represent data.]</code> <code>[PropertyConceptDefinitionSource = NCI]</code> <code>[PropertyConceptPreferredName = Encode]</code>

Attribute	Notes	Constraints and tags
<b>compression</b> CD Private [0..1]	Compression method used to compress the content in value attribute.	<p><i>Default:</i></p> <p>[CADDR_Description = Compression method used to compress the content in value attribute.]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Compression method used to compress the content in value attribute.]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C41208 ]</p> <p>[PropertyConceptDefinition = The act, process, or result of pressing together, flattening, or condensing, particularly, increasing an external physical pressure on a body structure. Also refers to the reduction in the volume of a body or substance and augmentation of its density due ]</p> <p>[PropertyConceptDefinition_2 = to pressure.]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Compression ]</p>

### Operations

Method	Notes	Parameters
<b>GetValue()</b> ST Public		
<b>SetValue()</b> void Public		<b>ST</b> [in] newVal
<b>GetCompression()</b> CD Public	Compression method used to compress the content in value attribute.	
<b>GetEncoding()</b> CD Public	Define string encoding method.	
<b>SetCompression()</b> void Public	Compression method used to compress the content in value attribute.	<b>CD</b> [in] newVal
<b>SetEncoding()</b> void Public	Define string encoding method.	<b>CD</b> [in] newVal

### *Coordinate*

Type:

Class

Status:

Proposed. Version 1.0. Phase 1.0.

*Package:* AIM      *Keywords:*  
*Detail:* Created on 11/9/2011. Last modified on 11/9/2011.  
*GUID:* {1929893B-A046-4d9d-88EB-456358A2EE84}

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = Location within a dimension..
- CURATOR REVIEWED = 1.
- documentation = Location within a dimension..
- documentation = Location within a dimension..
- ObjectClassConceptCode = C44465.
- ObjectClassConceptDefinition = A number or other designation that identifies a position relative to an axis or grid..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Coordinate.
- OWNER REVIEWED = 1.

### Connections

Connector	Source	Target	Notes
<b>Association</b> Source -> Destination	Private calculationData CalculationData	Private coordinateCollection Coordinate	

### Attributes

Attribute	Notes	Constraints and tags
<b>dimensionIndex INT</b> Private	which dimension the data belongs to	<p><i>Default:</i></p> <p>[CADSR_Description = Which dimension the data belongs to. ]  [<u>CADSR_VD_ID</u> = 2803195 ]  [<u>CADSR_VD_VERSION</u> = 1.0 ]  [CURATOR REVIEWED = 1 ]  [description = Which dimension the data belongs to. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25390 ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyConceptDefinition = A numerical scale used to compare variables with one another or with some reference number; a number used to select an element of a list, vector, array or other sequence. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Index ]</p> <p>[PropertyQualifierConceptCode1 = C25483 ]</p> <p>[PropertyQualifierConceptDefinition1 = The spatial outline of an object as described by the configuration of straight or curved lines. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = 3-Dimensional ]</p>
<b>position</b> INT Private	Position within the dimension	<p><i>Default:</i></p> <p>[CADSR_Description = Position within the dimension. ]</p> <p>[CADSR_VD_ID = 2803195 ]</p> <p>[CADSR_VD_VERSION = 1.0 ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Position within the dimension. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C25341 ]</p> <p>[PropertyConceptDefinition = A position, site, or point in space where something can be found. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Location ]</p>

### ***Operations***

Method	Notes	Parameters
<b>GetDimensionIndex()</b> INT Public	which dimension the data belongs to	
<b>GetPosition()</b> INT Public	Position within the dimension	
<b>SetDimensionIndex()</b> void Public	which dimension the data belongs to	INT [in] newVal
<b>SetPosition()</b> void Public	Position within the dimension	INT [in] newVal

Method	Notes	Parameters

## Dimension

Type: **Class**

Status: Proposed. Version 1.0. Phase 1.0.

Package: AIM      Keywords:

Detail: Created on 11/9/2011. Last modified on 11/9/2011.

GUID: {13CBE5D3-7AE8-46cb-8119-A1B81D5029DD}

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = Describes properties of a single dimension of a result of calculation..
- CURATOR REVIEWED = 1.
- documentation = Describes properties of a single dimension of a result of calculation..
- ObjectClassConceptCode = C25483.
- ObjectClassConceptDefinition = The spatial outline of an object as described by the configuration of straight or curved lines..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = 3-Dimensional.
- OWNER REVIEWED = 1.

### Connections

Connector	Source	Target	Notes
<b>Association</b> Source -> Destination	Private calculationResult CalculationResult	Private dimensionCollection Dimension	

### Attributes

Attribute	Notes	Constraints and tags

Attribute	Notes	Constraints and tags
<b>index</b> INT Private	Zero based unique index of the dimension	<p><i>Default:</i></p> <p>[CADSR_Description = Zero based unique index of the dimension.]  [CADSR_VD_ID = 2803195]  [CADSR_VD_VERSION = 1.0]  [CURATOR REVIEWED = 1]  [description = Zero based unique index of the dimension.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C25390]  [PropertyConceptDefinition = A numerical scale used to compare variables with one another or with some reference number; a number used to select an element of a list, vector, array or other sequence.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Index]</p>
<b>size</b> INT Private	How many members a dimension has	<p><i>Default:</i></p> <p>[CADSR_Description = How many members a dimension has.]  [CADSR_VD_ID = 2803195]  [CADSR_VD_VERSION = 1.0]  [CURATOR REVIEWED = 1]  [description = How many members a dimension has.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C25681]  [PropertyConceptDefinition = The physical magnitude of something.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Size]</p>
<b>label</b> ST Private	A human readable description of the dimension	<p><i>Default:</i></p> <p>[CADSR_Description = A human readable description of the dimension.]  [CADSR_VD_ID = 2803207]  [CADSR_VD_VERSION = 1.0]  [CURATOR REVIEWED = 1]  [description = A human readable description of the dimension.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C45561]  [PropertyConceptDefinition = A brief description given for purposes]</p>

Attribute	Notes	Constraints and tags
		of identification; an identifying or descriptive marker that is attached to an object. ] [PropertyConceptDefinitionSource = NCI ] [PropertyConceptPreferredName = Label ]

**Operations**

Method	Notes	Parameters
<b>GetIndex()</b> INT Public	Zero based unique index of the dimension	
<b>GetLabel()</b> ST Public	A human readable description of the dimension	
<b>GetSize()</b> INT Public	How many members a dimension has	
<b>SetIndex()</b> void Public	Zero based unique index of the dimension	<b>INT</b> [in] newVal
<b>SetLabel()</b> void Public	A human readable description of the dimension	<b>ST</b> [in] newVal
<b>SetSize()</b> void Public	How many members a dimension has	<b>INT</b> [in] newVal

***TwoDimensionEllipse*****Type:**      **Class**      **TwoDimensionGeometricShapeEntity****Status:**      Proposed. Version 1.0. Phase 1.0.**Package:**      AIM      **Keywords:****Detail:**      Created on 11/9/2011. Last modified on 3/15/2012.**GUID:**      {DDBB3B99-1905-41e6-A17B-802B7617C360}

An ellipse defined by four pixel (column, row) pairs, the first two points specifying the endpoints of the major axis and the second two points specifying the endpoints of the minor axis of an ellipse.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = An ellipse is defined by four pairs of coordinates, the first two coordinates specify the endpoints of the major axis and the second two coordinates specify the endpoints of the minor axis of an ellipse..
- CADSR\_Inherited.comment.OWNER REVIEWED = 1.

- CADSR\_Inherited.description.OWNER REVIEWED = 1.
- CADSR\_Inherited.imageReferenceUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.VD\_ID = 2803169.
- CADSR\_Inherited.includeFlag.VD\_VERSION = 1.0.
- CADSR\_Inherited.interpolationMethod.OWNER REVIEWED = 1.
- CADSR\_Inherited.label.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.VD\_ID = 2803207.
- CADSR\_Inherited.lineColor.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineOpacity.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineOpacity.VD\_ID = 2803207.
- CADSR\_Inherited.lineOpacity.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineStyle.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineStyle.VD\_ID = 2803207.
- CADSR\_Inherited.lineStyle.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineThickness.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineThickness.VD\_ID = 2803207.
- CADSR\_Inherited.lineThickness.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.questionIndex.VD\_ID = 2803195.
- CADSR\_Inherited.questionIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionTypeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.referencedFrameNumber.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.VD\_ID = 2803195.
- CADSR\_Inherited.shapeIdentifier.VD\_VERSION = 1.0.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.

- CADSR\_Inherited.Uri.OWNER REVIEWED = 1.
- CADSR\_Inherited.uri.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An ellipse is defined by four pairs of coordinates, the first two coordinates specify the endpoints of the major axis and the second two coordinates specify the endpoints of the minor axis of an ellipse..
- ObjectClassConceptCode = C64362.
- ObjectClassConceptDefinition = A closed plane curve resulting from the intersection of a circular cone and a plane cutting completely through it, especially a plane not parallel to the base..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Ellipse.
- ObjectClassQualifierConceptCode1 = C48282.
- ObjectClassQualifierConceptDefinition1 = The property of being measured and described using two orthogonal directions..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = 2-Dimensional.
- OWNER REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public TwoDimensionEllipse	Public TwoDimensionGeometricShapeEntity	

**Equipment****Type:** Class**Status:** Proposed. Version 1.0. Phase 1.0.**Package:** AIM    **Keywords:****Detail:** *Created on 11/9/2011. Last modified on 11/21/2012.***GUID:** {F24A8702-E05A-4013-B798-E0D957A4387E}**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = The imaging equipment used to obtain an in vivo image..
- CURATOR\_REVIEWS = 1.
- documentation = The imaging equipment used to obtain an in vivo image..
- ObjectClassConceptCode = C19238.
- ObjectClassConceptDefinition = A manufactured object that is used to perform diagnostic, therapeutic or research activities..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Diagnostic, Therapeutic, or Research Equipment.
- OWNER\_REVIEWS = 1.

**Connections**

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private annotationCollection AnnotationCollection	Private equipment Equipment	

**Attributes**

Attribute	Notes	Constraints and tags
<b>manufacturerName</b> ST Private	Text to capture the name of the manufacturer of medical imaging equipment.	<p><i>Default:</i></p> <p>[CADSR_Description = Text to capture the name of the manufacturer of medical imaging equipment.]  [CURATOR_REVIEWS = 1 ]  [description = Text to capture the name of the manufacturer of medical imaging equipment.]  [OWNER_REVIEWS = 1 ]  [PropertyConceptCode = C42614 ]  [PropertyConceptDefinition = The words or language units by which a thing is known.]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Name ]  [PropertyQualifierConceptCode1 = C25392 ]  [PropertyQualifierConceptDefinition]</p>

Attribute	Notes	Constraints and tags
		<p><u>n1</u> = A person, enterprise, or entity that produces finished goods. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Manufacturer ]</p>
<b>manufacturerModelName</b> ST Private [0..1]	Text to capture the manufacturer's model names of the (imaging) equipment that produced the composite instances.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = Text to capture the manufacturer's model names of the (imaging) equipment that produced the composite instances. ]</p> <p>[<u>CADSR_VD_ID</u> = 2803207 ]</p> <p>[<u>CADSR_VD_VERSION</u> = 1.0 ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = Text to capture the manufacturer's model names of the (imaging) equipment that produced the composite instances. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C42614 ]</p> <p>[<u>PropertyConceptDefinition</u> = The words or language units by which a thing is known. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Name ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C43383 ]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C25392 ]</p> <p>[<u>PropertyQualifierConceptDefinition</u>  <u>n1</u> = A style or design of an item. ]</p> <p>[<u>PropertyQualifierConceptDefinition</u>  <u>n2</u> = A person, enterprise, or entity that produces finished goods. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Model ]</p> <p>[<u>PropertyQualifierConceptPreferredName2</u> = Manufacturer ]</p>

Attribute	Notes	Constraints and tags
<b>deviceSerialNumber</b> ST Private [0..1]	Manufacturer's serial number of the equipment that produced the sources.	<p><i>Default:</i></p> <p>[CADSR_Description = Manufacturer's serial number of the equipment that produced the sources.]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Manufacturer's serial number of the equipment that produced the sources. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C73518 ]</p> <p>[PropertyConceptDefinition = A unique identifier assigned to a member of a series of similar items.]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Serial Number ]</p> <p>[PropertyQualifierConceptCode1 = C62103 ]</p> <p>[PropertyQualifierConceptDefinition1 = An object contrived for a specific purpose. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Device ]</p>
<b>softwareVersion</b> ST Private [0..1]	Numeric value to designate manufacturer's software version of the equipment that produced the (imaging) composite instances.	<p><i>Default:</i></p> <p>[CADSR_Description = Numeric value to designate manufacturer's software version of the equipment that produced the (imaging) composite instances.]</p> <p>[CADSR_VD_ID = 2803207 ]</p> <p>[CADSR_VD_VERSION = 1.0 ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Numeric value to designate manufacturer's software version of the equipment that produced the (imaging) composite instances. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C25714 ]</p> <p>[PropertyConceptDefinition = A form or variant of a type or original; one of a sequence of copies of a program, each incorporating new modifications.]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p>

Attribute	Notes	Constraints and tags
		[PropertyConceptPreferredName = Version ] [PropertyQualifierConceptCode1 = C17146 ] [PropertyQualifierConceptDefinition1 = A set of coded instructions, which a computer follows in processing data, performing an operation, or solving a logical problem, upon execution of the program. ] [PropertyQualifierConceptDefinitionSource1 = NCI ] [PropertyQualifierConceptPreferredName1 = Computer Program ]

***Operations***

Method	Notes	Parameters
<b>GetManufacturerModelName()</b> ST Public	Text to capture the manufacturer's model names of the (imaging) equipment that produced the composite instances.	
<b>GetManufacturerName()</b> ST Public	Text to capture the name of the manufacturer of medical imaging equipment.	
<b>SetManufacturerModelName()</b> void Public	Text to capture the manufacturer's model names of the (imaging) equipment that produced the composite instances.	<b>ST</b> [in] newVal
<b>SetManufacturerName()</b> void Public	Text to capture the name of the manufacturer of medical imaging equipment.	<b>ST</b> [in] newVal
<b>GetSoftwareVersion()</b> ST Public	Numeric value to designate manufacturer's software version of the equipment that produced the (imaging) composite instances.	
<b>SetSoftwareVersion()</b> void Public	Numeric value to designate manufacturer's software version of the equipment that produced the (imaging) composite instances.	<b>ST</b> [in] newVal
<b>GetDeviceSerialNumber()</b> ST Public	Manufacturer's serial number of the equipment that produced the sources.	
<b>SetDeviceSerialNumber()</b> void Public	Manufacturer's serial number of the equipment that produced the sources.	<b>ST</b> [in] newVal

***ExtendedCalculationResult***

Type: **Class**    **CalculationResult**  
 Status: Proposed. Version 1.0. Phase 1.0.

*Package:* AIM      *Keywords:*  
*Detail:* Created on 11/9/2011. Last modified on 1/2/2013.  
*GUID:* {A6F53619-BE05-404c-A0D1-6234A514C752}

Stores a result of a calculation individually with precise location of each element in the result. It supports sparse matrix type result.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = The result of a calculation..
- CADSR\_Inherited.dataType.OWNER\_REVIEWS = 1.
- CADSR\_Inherited.type.OWNER\_REVIEWS = 1.
- CADSR\_Inherited.unitOfMeasure.OWNER\_REVIEWS = 1.
- CURATOR\_REVIEWS = 1.
- documentation = Stores a result of a calculation individually with precise location of each element in the result. It supports sparse matrix type result..
- ObjectClassConceptCode = C20200.
- ObjectClassConceptDefinition = The result of an action..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Outcome.
- ObjectClassQualifierConceptCode1 = C54125.
- ObjectClassQualifierConceptCode2 = C25270.
- ObjectClassQualifierConceptDefinition1 = The procedure or activity of determining something by mathematical or logical methods..
- ObjectClassQualifierConceptDefinition2 = To increase in length or duration..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Calculation.
- ObjectClassQualifierConceptPreferredName2 = Extend.
- OWNER\_REVIEWS = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ExtendedCalculationResult	Public CalculationResult	
<b>Association</b> Source -> Destination	Private calculationResult ExtendedCalculationResult	Private calculationDataCollection CalculationData	

**Operations**

Method	Notes	Parameters
<b>GetCalculationDataCollection()</b> CalculationData[] Public		
<b>SetCalculationDataCollection()</b> void Public		<b>CalculationData[] [in]</b> calculationData

***GeometricShapeEntity*****Type:**      **Class**    **MarkupEntity****Status:**      Proposed. Version 1.0. Phase 1.0.**Package:**      AIM      **Keywords:****Detail:**      Created on 11/9/2011. Last modified on 3/14/2012.**GUID:**      {8099B45A-7D61-4464-8900-FA2FF4173E6F}

The shape of graphical drawing placed on a region of interest (ROI).

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = The shape of graphical drawing placed on a region of interest (ROI)..
- CADSR\_Inherited.uniqueIdentifier.OWNER\_REVIEWS = 1.
- CURATOR\_REVIEWS = 1.
- documentation = The shape of graphical drawing placed on a region of interest (ROI)..
- ObjectClassConceptCode = C25677.
- ObjectClassConceptDefinition = The spatial arrangement of something as distinct from its substance..
- ObjectClassConceptDefinitionSource = NCI.

- ObjectClassConceptPreferredName = Shape.
- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public ThreeDimensionGeometricShapeEntity	Public GeometricShapeEntity	
<b>Generalization</b> Source -> Destination	Public TwoDimensionGeometricShapeEntity	Public GeometricShapeEntity	
<b>Association</b> Source -> Destination	Private textAnnotationEntity TextAnnotationEntity	Private geometricShapeEntity GeometricShapeEntity	
<b>Generalization</b> Source -> Destination	Public GeometricShapeEntity	Public MarkupEntity	

***Attributes***

Attribute	Notes	Constraints and tags
<b>questionTypeCode</b> CD Private [0..n]	Coded entry data used to describe or capture the question being asked about imaging inference. It is associated with the typeCode.	<p><i>Default:</i></p> <p>[CADCY Description] = Coded entry data used to describe or capture the question being asked about imaging inference. It is associated with the typeCode. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description] = Coded entry data used to describe or capture the question being asked about imaging inference. It is associated with the typeCode. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode] = C93698 ]</p> <p>[PropertyConceptDefinition] = A coded value specifying an identifiable class of an entity or activity based on common qualities. ]</p> <p>[PropertyConceptDefinitionSource] = NCI ]</p> <p>[PropertyConceptPreferredName] = Type Code ]</p> <p>[PropertyQualifierConceptCode1] = C41116 ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyQualifierConceptDefinition1 = A sentence of inquiry that asks for a reply; a request for information (e.g., a formal request to a database or search engine). ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Question ]</p>
<b>shapeIdentifier</b> INT Private	A unique integer assigned to each shape within an annotation.	<p><i>Default:</i></p> <p>[CADSR_Description = An integer number that uniquely identifies a graphical shape in the annotation. ]</p> <p>[CADSR_VD_ID = 2803195 ]</p> <p>[CADSR_VD_VERSION = 1.0 ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = An integer number that uniquely identifies a graphical shape in the annotation. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C25364 ]</p> <p>[PropertyConceptDefinition = One or more characters used to identify, name, or characterize the nature, properties, or contents of a thing. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Identifier ]</p> <p>[PropertyQualifierConceptCode1 = C25677 ]</p> <p>[PropertyQualifierConceptDefinition1 = The spatial arrangement of something as distinct from its substance. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Shape ]</p>
<b>label</b> ST Private  [0..1]	A human readable description of the geometric shape.	<p><i>Default:</i></p> <p>[CADSR_Description = A human readable description of the geometric shape. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = A human readable description of the geometric shape. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C45561 ]</p> <p>[PropertyConceptDefinition = A brief description given for purposes</p>

Attribute	Notes	Constraints and tags
		of identification; an identifying or descriptive marker that is attached to an object. ] [PropertyConceptDefinitionSource = NCI ] [PropertyConceptPreferredName = Label ]
<b>description</b> ST Private [0..1]	Free text about the geometric shape not intended for rendering. It is used to provide user detail information related to how to create a markup for AIM annotation.	<p><i>Default:</i></p> <p>[CADSR_Description = Free text about the geometric shape not intended for rendering. It is used to provide user detail information related to how to create a markup for AIM annotation. ]  [CURATOR REVIEWED = 1 ]  [description = Free text about the geometric shape not intended for rendering. It is used to provide user detail information related to how to create a markup for AIM annotation. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25365 ]  [PropertyConceptDefinition = A written or verbal account, representation, statement, or explanation of something. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Description ]</p>
<b>includeFlag</b> BL Private	A boolean flag that determines if the particular shape in question is donut or hole.	<p><i>Default:</i></p> <p>[CADSR_Description = A boolean flag that indicates if the shape is to be included (true) or excluded (false) from the annotation. Intended to allow specific components of a lesion to be excluded such as in a donut. ]  [CADSR_VD_ID = 2803169 ]  [CADSR_VD_VERSION = 1.0 ]  [CURATOR REVIEWED = 1 ]  [description = A boolean flag that indicates if the shape is to be included (true) or excluded (false) from the annotation. Intended to allow specific components of a lesion to be excluded such as in a donut. ]  [OWNER REVIEWED = 1 ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyConceptCode = C43578 ]  [PropertyConceptDefinition = An indicator that can be set or unset in order to signal whether a particular condition is true. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Flag ]  [PropertyQualifierConceptCode1 = C74521 ]  [PropertyQualifierConceptDefinition1 = Add as part of something else; put in as part of a set, group, or category. ]  [PropertyQualifierConceptDefinitionSource1 = NCI ]  [PropertyQualifierConceptPreferredName1 = Include ]</p>
<b>comment</b> ST Private  [0..1]	Free text about a geometric shape entity.	<p><i>Default:</i></p> <p>[CADSR_Description = Free text about a geometric shape entity. ]  [description = Free text about a geometric shape entity. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25393 ]  [PropertyConceptDefinition = A written explanation, observation or criticism added to textual material. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Comment ]</p>
<b>lineColor</b> ST Private  [0..1]	Color of the line to be used for markup of the geometric shape.	<p><i>Default:</i></p> <p>[CADSR_Description = Color of the line to be used for markup of the geometric shape. ]  [CADSR_VD_ID = 2803207 ]  [CADSR_VD_VERSION = 1.0 ]  [CURATOR REVIEWED = 1 ]  [description = Color of the line to be used for markup of the geometric shape. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C37927 ]  [PropertyConceptDefinition = The appearance of objects (or light sources) described in terms of a person's perception of their hue and lightness (or brightness) and ]</p>

Attribute	Notes	Constraints and tags
		<p>saturation. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Color ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C71604 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = A mark that is long relative to its width; a length (straight or curved) without breadth or thickness; the trace of a moving point. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Line ]</p>
<b>lineOpacity</b> ST Private [0..1]	<p>Opacity of the line to be used for markup of the geometric shape.</p>	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = Opacity of the line to be used for markup of the geometric shape. ]</p> <p>[<u>CADSR_VD_ID</u> = 2803207 ]</p> <p>[<u>CADSR_VD_VERSION</u> = 1.0 ]</p> <p>[<u>CURATOR_REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = Opacity of the line to be used for markup of the geometric shape. ]</p> <p>[<u>OWNER_REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C71596 ]</p> <p>[<u>PropertyConceptDefinition</u> = The quality of being opaque to a degree; the degree to which something reduces the passage of light. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Opacity ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C71604 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = A mark that is long relative to its width; a length (straight or curved) without breadth or thickness; the trace of a moving point. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Line ]</p>

Attribute	Notes	Constraints and tags
<b>lineStyle</b> ST Private [0..1]	Style of the line to be used for markup of the geometric shape.	<p><i>Default:</i></p> <p>[CADSR_Description = Style of the line to be used for markup of the geometric shape.]            [CADSR_VD_ID = 2803207]            [CADSR_VD_VERSION = 1.0]            [CURATOR REVIEWED = 1]            [description = Style of the line to be used for markup of the geometric shape.]            [OWNER REVIEWED = 1]            [PropertyConceptCode = C71598]            [PropertyConceptDefinition = A particular kind (as to appearance).]            [PropertyConceptDefinitionSource = NCI]            [PropertyConceptPreferredName = Style]            [PropertyQualifierConceptCode1 = C71604]            [PropertyQualifierConceptDefinition1 = A mark that is long relative to its width; a length (straight or curved) without breadth or thickness; the trace of a moving point.]            [PropertyQualifierConceptDefinitionSource1 = NCI]            [PropertyQualifierConceptPreferredName1 = Line]</p>
<b>lineThickness</b> ST Private [0..1]	Thickness of the line to be used for markup of the geometric shape.	<p><i>Default:</i></p> <p>[CADSR_Description = Thickness of the line to be used for markup of the geometric shape.]            [CADSR_VD_ID = 2803207]            [CADSR_VD_VERSION = 1.0]            [CURATOR REVIEWED = 1]            [description = Thickness of the line to be used for markup of the geometric shape.]            [OWNER REVIEWED = 1]            [PropertyConceptCode = C41145]            [PropertyConceptDefinition = The dimension between two surfaces of an object, usually the smallest dimension as opposed to the width or the length; also, viscous consistency.]            [PropertyConceptDefinitionSource = NCI]            [PropertyConceptPreferredName =]</p>

Attribute	Notes	Constraints and tags
		<p>Thickness ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C71604 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = A mark that is long relative to its width; a length (straight or curved) without breadth or thickness; the trace of a moving point. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Line ]</p>
<b>questionIndex</b> INT Private  [0..1]	It is used to store an index value that identifies the order of the question in an AIM Template.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = It is used to store an index value that identifies the order of the question in an AIM Template. ]</p> <p>[<u>CADSR_VD_ID</u> = 2803195 ]</p> <p>[<u>CADSR_VD_VERSION</u> = 1.0 ]</p> <p>[<u>CURATOR_REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = It is used to store an index value that identifies the order of the question in an AIM Template. ]</p> <p>[<u>OWNER_REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C25390 ]</p> <p>[<u>PropertyConceptDefinition</u> = A numerical scale used to compare variables with one another or with some reference number; a number used to select an element of a list, vector, array or other sequence. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Index ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C41116 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = A sentence of inquiry that asks for a reply; a request for information (e.g., a formal request to a database or search engine). ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Question ]</p>

Attribute	Notes	Constraints and tags
<b>interpolationMethod</b> CD Private [0..1]	An interpolation method such as linear, polynomial, spline and piecewise constant interpolation that is used to create new data points from a discrete set of data points.	<i>Default:</i>  [ <u>CADSR_Description</u> = A discrete set of data points is used to create new data points based on an interpolation method such as linear, polynomial, spline and piecewise constant interpolation.] [ <u>CURATOR REVIEWED</u> = 1 ] [ <u>description</u> = An interpolation method such as linear, polynomial, spline and piecewise constant interpolation that is used to create new data points from a discrete set of data points.] [ <u>OWNER REVIEWED</u> = 1 ] [ <u>PropertyConceptCode</u> = C71460 ] [ <u>PropertyConceptDefinition</u> = A means, manner of procedure, or systematic course of actions that have to be performed in order to accomplish a particular goal.] [ <u>PropertyConceptDefinitionSource</u> = NCI ] [ <u>PropertyConceptPreferredName</u> = Method ] [ <u>PropertyQualifierConceptCode1</u> = C81208 ] [ <u>PropertyQualifierConceptDefinition1</u> = The substitution of missing data with an estimated value that falls between known data points.] [ <u>PropertyQualifierConceptDefinitionSource1</u> = NCI ] [ <u>PropertyQualifierConceptPreferredName1</u> = Interpolation Imputation Technique ]

### Operations

Method	Notes	Parameters
<b>GetIncludeFlag()</b> BL Public	A boolean flag that determines if the particular shape in question is donut or hole.	
<b>GetLineColor()</b> ST Public	Color of the line to be used for markup of the geometric shape.	
<b>GetLineOpacity()</b> ST Public	Opacity of the line to be used for markup of the geometric shape.	
<b>GetLineStyle()</b> ST Public	Style of the line to be used for markup of the geometric shape.	
<b>GetLineThickness()</b> ST	Thickness of the line to be used for markup of	

Method	Notes	Parameters
Public	the geometric shape.	
<b>GetShapeIdentifier()</b> INT Public	A unique integer assigned to each shape within an annotation.	
<b>SetIncludeFlag()</b> void Public	A boolean flag that determines if the particular shape in question is donut or hole.	<b>BL</b> [in] newVal
<b>SetLineColor()</b> void Public	Color of the line to be used for markup of the geometric shape.	<b>ST</b> [in] newVal
<b>SetLineOpacity()</b> void Public	Opacity of the line to be used for markup of the geometric shape.	<b>ST</b> [in] newVal
<b>SetLineStyle()</b> void Public	Style of the line to be used for markup of the geometric shape.	<b>ST</b> [in] newVal
<b>SetLineThickness()</b> void Public	Thickness of the line to be used for markup of the geometric shape.	<b>ST</b> [in] newVal
<b>SetShapeIdentifier()</b> void Public	A unique integer assigned to each shape within an annotation.	<b>INT</b> [in] newVal
<b>GetLabel()</b> ST Public		
<b>SetLabel()</b> void Public		<b>ST</b> [in] newVal
<b>GetDescription()</b> ST Public		
<b>SetDescription()</b> void Public		<b>ST</b> [in] newVal
<b>GetQuestionTypeCode()</b> CD Public	Coded entry data used to describe or capture the question being asked about imaging inference. It is associated with the typeCode.	
<b>SetQuestionTypeCode()</b> void Public	Coded entry data used to describe or capture the question being asked about imaging inference. It is associated with the typeCode.	<b>CD</b> [in] newVal
<b>GetQuestionIndex()</b> INT Public	It is used to store an index value that identifies the order of the question in an AIM Template.	
<b>SetQuestionIndex()</b> void Public	It is used to store an index value that identifies the order of the question in an AIM Template.	<b>INT</b> [in] newVal
<b>GetInterpolationMethod( )</b> CD Public		
<b>SetInterpolationMethod()</b> void Public		<b>CD</b> [in] newVal
<b>GetComment()</b> ST Public	Free text about a geometric shape entity.	

Method	Notes	Parameters
<b>SetComment()</b> void Public	Free text about a geometric shape entity.	<b>ST</b> [in] newVal

### *ImageAnnotation*

**Type:** Class **AnnotationEntity**  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM **Keywords:**  
**Detail:** *Created on 11/9/2011. Last modified on 4/2/2012.*  
**GUID:** {EB76A668-364C-45fc-89A3-6175C838D7D7}

ImageAnnotations annotate images.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Inherited.aimVersion.DE\_ID = 2750438.
- CADSR\_Inherited.aimVersion.DE\_VERSION = 1.0.
- CADSR\_Inherited.comment.OWNER REVIEWED = 1.
- CADSR\_Inherited.dateTime.OWNER REVIEWED = 1.
- CADSR\_Inherited.id.DE\_ID = 2750437.
- CADSR\_Inherited.id.DE\_VERSION = 1.0.
- CADSR\_Inherited.name.OWNER REVIEWED = 1.
- CADSR\_Inherited.precedentReferencedAnnotationUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.templateUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.typeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = ImageAnnotations annotate images..
- ObjectClassConceptCode = C44272.
- ObjectClassConceptDefinition = An explanatory or critical comment that has been added to a text..
- ObjectClassConceptDefinitionSource = NCI.

- ObjectClassConceptPreferredName = Annotation.
- ObjectClassQualifierConceptCode1 = C48179.
- ObjectClassQualifierConceptDefinition1 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Image.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private imageAnnotationCollection ImageAnnotationCollection	Private imageAnnotations ImageAnnotation	
<b>Association</b> Bi-Directional	Private imageAnnotation ImageAnnotation	Private segmentationEntityCollection SegmentationEntity	
<b>Generalization</b> Source -> Destination	Public ImageAnnotation	Public AnnotationEntity	
<b>Association</b> Bi-Directional	Private imageAnnotation ImageAnnotation	Private imageReferenceEntityCollection ImageReferenceEntity	
<b>Association</b> Bi-Directional	Private imageAnnotation ImageAnnotation	Private imageAnnotationStatementCollection AnnotationStatement	
<b>Association</b> Bi-Directional	Private imageAnnotation ImageAnnotation	Private markupEntityCollection MarkupEntity	

***Operations***

Method	Notes	Parameters
<b>GetSegmentationEntityCollection()</b> SegmentationEntity[] Public		
<b>SetSegmentationEntityCollection()</b> void Public		<b>SegmentationEntity[] [in]</b> segmentationEntity

Method	Notes	Parameters
<b>GetImageReferenceEntityCollection()</b> ImageReferenceEntity[] Public		
<b>SetImageReferenceEntityCollection()</b> void Public		<b>ImageInferenceEntity[] [in]</b> imageInferenceEntity
<b>GetMarkupEntityCollection()</b> MarkupEntity[] Public		
<b>SetMarkupEntityCollection()</b> void Public		<b>MarkupEntity[] [in]</b> markupEntity
<b>GetAnnotationStatementCollection()</b> AnnotationStatement[] Public		
<b>SetImageAnnotationStatementCollection()</b> void Public		<b>ImageAnnotationStatement[] [in]</b> imageAnnotationStatement

## ImagePlane

Type: **Class**

Status: Proposed. Version 1.0. Phase 1.0.

Package: AIM      Keywords:

Detail: Created on 3/20/2012. Last modified on 3/20/2012.

GUID: {D08BBF2B-84FC-42b0-A09F-D17961A4E841}

The class contains common imaging attributes in DICOM Image Plane module. DICOM modalities that share the same module are CT, MR, RT and PET.

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = An abstract class that references the image being annotated..
- CURATOR REVIEWED = 1.
- documentation = The class contains common imaging attributes in DICOM Image Plane module. DICOM modalities that share the same module are CT, MR, RT and PET. .
- ObjectClassConceptCode = C102516.
- ObjectClassConceptDefinition = The position and orientation of the image slice relative to the patient-based coordinate system..

- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Image Plane.
- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private image Image	Private imagePlane ImagePlane	

***Attributes***

Attribute	Notes	Constraints and tags
<b>rowImageOrientationX</b> REAL Private [0..1]	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store row value X. The value may come from DICOM tag 0020,0037.</p>	<p><i>Default:</i></p> <p>[CADSR_Description = Image Orientation (0020,0037) specifies the direction cosines of the first row and the first column with respect to the patient. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z coordinates respectively.]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Image Orientation (0020,0037) specifies the direction cosines of the first row and the first column with respect to the patient. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C44477 ]</p> <p>[PropertyConceptDefinition = A horizontal coordinate that is used together with a vertical coordinate to specify an exact point in space.]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = X-Coordinate ]</p> <p>[PropertyQualifierConceptCode1 = C45788 ]</p> <p>[PropertyQualifierConceptCode2 = C48179 ]</p> <p>[PropertyQualifierConceptCode3 = C43378 ]</p> <p>[PropertyQualifierConceptDefinition = A vertical coordinate that is used together with a horizontal coordinate to specify an exact point in space.]</p>

Attribute	Notes	Constraints and tags
		<p><u>n1</u> = Position or alignment relative to points of the compass or other specific directions. ]</p> <p>[<a href="#">PropertyQualifierConceptDefinition1</a> = Any record of an imaging event whether physical or electronic. ]</p> <p>[<a href="#">PropertyQualifierConceptDefinition2</a> = An arrangement of objects side by side in a line. ]</p> <p>[<a href="#">PropertyQualifierConceptDefinition3</a> = NCI ]</p> <p>[<a href="#">PropertyQualifierConceptDefinitionSource1</a> = NCI ]</p> <p>[<a href="#">PropertyQualifierConceptDefinitionSource2</a> = NCI ]</p> <p>[<a href="#">PropertyQualifierConceptDefinitionSource3</a> = NCI ]</p> <p>[<a href="#">PropertyQualifierConceptPreferredName1</a> = Orientation ]</p> <p>[<a href="#">PropertyQualifierConceptPreferredName2</a> = Image ]</p> <p>[<a href="#">PropertyQualifierConceptPreferredName3</a> = Row ]</p>
<b>rowImageOrientationY</b> REAL Private  [0..1]	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store row value Y. The value may come from DICOM tag 0020,0037.</p>	<p><i>Default:</i></p> <p>[<a href="#">CADSR_Description</a> = Image Orientation (0020,0037) specifies the direction cosines of the first row and the first column with respect to the patient. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z coordinates respectively. ]</p> <p>[<a href="#">CURATOR REVIEWED</a> = 1 ]</p> <p>[<a href="#">description</a> = Image Orientation (0020,0037) specifies the direction cosines of the first row and the first column with respect to the patient. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively. ]</p> <p>[<a href="#">OWNER REVIEWED</a> = 1 ]</p> <p>[<a href="#">PropertyConceptCode</a> = C44478 ]</p> <p>[<a href="#">PropertyConceptDefinition</a> = A vertical coordinate that is used together with a horizontal coordinate to specify an exact point in space. ]</p> <p>[<a href="#">PropertyConceptDefinitionSource</a> = NCI ]</p> <p>[<a href="#">PropertyConceptPreferredName</a> = Y-Coordinate ]</p> <p>[<a href="#">PropertyQualifierConceptCode1</a> =</p>

Attribute	Notes	Constraints and tags
		<p>C45788 ]  <a href="#">[PropertyQualifierConceptCode2 = C48179 ]</a>  <a href="#">[PropertyQualifierConceptCode3 = C43378 ]</a>  <a href="#">[PropertyQualifierConceptDefinition1 = Position or alignment relative to points of the compass or other specific directions. ]</a>  <a href="#">[PropertyQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic. ]</a>  <a href="#">[PropertyQualifierConceptDefinition3 = An arrangement of objects side by side in a line. ]</a>  <a href="#">[PropertyQualifierConceptDefinitionSource1 = NCI ]</a>  <a href="#">[PropertyQualifierConceptDefinitionSource2 = NCI ]</a>  <a href="#">[PropertyQualifierConceptDefinitionSource3 = NCI ]</a>  <a href="#">[PropertyQualifierConceptPreferredName1 = Orientation ]</a>  <a href="#">[PropertyQualifierConceptPreferredName2 = Image ]</a>  <a href="#">[PropertyQualifierConceptPreferredName3 = Row ]</a></p>
<b>rowImageOrientationZ</b> REAL Private [0..1]	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store row value Y. The value may come from DICOM tag 0020,0037.</p>	<p><i>Default:</i></p> <p>[CADSR_Description = Image Orientation (0020,0037) specifies the direction cosines of the first row and the first column with respect to the patient. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z coordinates respectively.]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Image Orientation (0020,0037) specifies the direction cosines of the first row and the first column with respect to the patient. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C44479 ]</p> <p>[PropertyConceptDefinition = A third coordinate that is used together with horizontal (x) and vertical (y) coordinates to specify an exact point]</p>

Attribute	Notes	Constraints and tags
		<p>in a three dimensional space.]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Z-Coordinate ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C45788 ]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C48179 ]</p> <p>[<u>PropertyQualifierConceptCode3</u> = C43378 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = Position or alignment relative to points of the compass or other specific directions.]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = Any record of an imaging event whether physical or electronic.]</p> <p>[<u>PropertyQualifierConceptDefinition3</u> = An arrangement of objects side by side in a line.]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource3</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Orientation ]</p> <p>[<u>PropertyQualifierConceptPreferredName2</u> = Image ]</p> <p>[<u>PropertyQualifierConceptPreferredName3</u> = Row ]</p>
<b>columnImageOrientation</b> <b>X REAL</b> Private [0..1]	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store column value X. The value may come from DICOM tag 0020,0037.</p>	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z coordinates respectively followed by the Column value for the x ]</p> <p>[<u>CADSR_Description2</u> = , y, and z coordinates respectively.]</p> <p>This attribute store column value X. The value may come from DICOM tag 0020,0037.]</p> <p>[<u>CURATOR_REVIEWED</u> = 1 ]</p> <p>[<u>OWNER_REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C44477 ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyConceptDefinition = A horizontal coordinate that is used together with a vertical coordinate to specify an exact point in space.]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = X-Coordinate ]</p> <p>[PropertyQualifierConceptCode1 = C45788 ]</p> <p>[PropertyQualifierConceptCode2 = C48179 ]</p> <p>[PropertyQualifierConceptCode3 = C43379 ]</p> <p>[PropertyQualifierConceptDefinition1 = Position or alignment relative to points of the compass or other specific directions.]</p> <p>[PropertyQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic.]</p> <p>[PropertyQualifierConceptDefinition3 = An arrangement of objects one under another in a line.]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource3 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Orientation ]</p> <p>[PropertyQualifierConceptPreferredName2 = Image ]</p> <p>[PropertyQualifierConceptPreferredName3 = Column ]</p>
<b>columnImageOrientation</b> <b>Y</b> REAL Private [0..1]	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store column value Y. The value may come from DICOM tag 0020,0037.</p>	<p><i>Default:</i></p> <p>[CADSR_Description = Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z coordinates respectively followed by the Column value for the x ]</p> <p>[CADSR_Description2 = , y, and z coordinates respectively.]</p> <p>This attribute store column value Y. The value may come from DICOM tag 0020,0037.]</p>

Attribute	Notes	Constraints and tags
		<p>[CURATOR REVIEWED = 1 ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C44478 ]  [PropertyConceptDefinition = A vertical coordinate that is used together with a horizontal coordinate to specify an exact point in space. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Y-Coordinate ]  [PropertyQualifierConceptCode1 = C45788 ]  [PropertyQualifierConceptCode2 = C48179 ]  [PropertyQualifierConceptCode3 = C43379 ]  [PropertyQualifierConceptDefinition1 = Position or alignment relative to points of the compass or other specific directions. ]  [PropertyQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic. ]  [PropertyQualifierConceptDefinition3 = An arrangement of objects one under another in a line. ]  [PropertyQualifierConceptDefinitionSource1 = NCI ]  [PropertyQualifierConceptDefinitionSource2 = NCI ]  [PropertyQualifierConceptDefinitionSource3 = NCI ]  [PropertyQualifierConceptPreferredName1 = Orientation ]  [PropertyQualifierConceptPreferredName2 = Image ]  [PropertyQualifierConceptPreferredName3 = Column ]</p>
<b>columnImageOrientation</b> <b>Z</b> REAL Private [0..1]	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store column value Z. The value may come from DICOM tag 0020,0037.</p>	<p><i>Default:</i></p> <p>[CADSR_Description = Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z coordinates respectively followed by the Column value for the x ]  [CADSR_Description2 = , y, and z coordinates respectively.]</p>

Attribute	Notes	Constraints and tags
		<p>This attribute store column value Z. The value may come from DICOM tag 0020,0037. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C44479 ]</p> <p>[PropertyConceptDefinition = A third coordinate that is used together with horizontal (x) and vertical (y) coordinates to specify an exact point in a three dimensional space. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Z-Coordinate ]</p> <p>[PropertyQualifierConceptCode1 = C45788 ]</p> <p>[PropertyQualifierConceptCode2 = C48179 ]</p> <p>[PropertyQualifierConceptCode3 = C43379 ]</p> <p>[PropertyQualifierConceptDefinition1 = Position or alignment relative to points of the compass or other specific directions. ]</p> <p>[PropertyQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic. ]</p> <p>[PropertyQualifierConceptDefinition3 = An arrangement of objects one under another in a line. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource2 = NCI ]</p> <p>[PropertyQualifierConceptDefinitionSource3 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Orientation ]</p> <p>[PropertyQualifierConceptPreferredName2 = Image ]</p> <p>[PropertyQualifierConceptPreferredName3 = Column ]</p>
<b>verticalPixelSpacing</b> REAL Private [0..1]	<p>Physical distance in the patient between the center of each pixel, specified by a numeric pair. This attribute stores adjacent column or vertical spacing in millimeter (mm).</p> <p>All pixel spacing related attributes shall have positive non-zero values, except Physical distance in the patient between the center of</p>	<p><i>Default:</i></p> <p>[CADSR Description = Physical distance in the patient between the center of each pixel, specified by a numeric pair. This attribute stores adjacent column or vertical spacing in millimeter (mm). ]</p>

Attribute	Notes	Constraints and tags
	<p>each pixel, specified by a numeric pair. This attribute stores adjacent column or vertical spacing in millimeter (mm). When there is only a single row or column or pixel of data present, in which case the corresponding value may be zero. This attribute and description applies to and able to store values from:</p> <ul style="list-style-type: none"> <li>• Pixel Spacing (0028,0030)</li> <li>• Imager Pixel Spacing (0018,1164)</li> <li>• Nominal Scanned Pixel Spacing (0018,2010)</li> </ul>	<p>[CURATOR REVIEWED = 1 ]  [description = Physical distance in the patient between the center of each pixel, specified by a numeric pair. This attribute stores adjacent column or vertical spacing in millimeter (mm). ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C45786 ]  [PropertyConceptDefinition = An intervening interval of space or time. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Spacing ]  [PropertyQualifierConceptCode1 = C48367 ]  [PropertyQualifierConceptCode2 = C25243 ]  [PropertyQualifierConceptDefinition1 = The smallest resolvable rectangular area of an image, either on a screen or stored in memory. ]  [PropertyQualifierConceptDefinition2 = Upright in position or posture. ]  [PropertyQualifierConceptDefinitionSource1 = NCI ]  [PropertyQualifierConceptDefinitionSource2 = NCI ]  [PropertyQualifierConceptPreferredName1 = Pixel ]  [PropertyQualifierConceptPreferredName2 = Vertical ]</p>
<b>horizontalPixelSpacing</b> REAL Private [0..1]	<p>Physical distance in the patient between the center of each pixel, specified by a numeric pair. This attribute stores adjacent row or horizontal spacing in millimeter (mm).</p> <p>All pixel spacing related attributes shall have positive non-zero values, except Physical distance in the patient between the center of each pixel, specified by a numeric pair. This attribute stores adjacent column or vertical spacing in millimeter (mm). When there is only a single row or column or pixel of data present, in which case the corresponding value may be zero. This attribute and description applies to and able to store values from:</p> <ul style="list-style-type: none"> <li>• Pixel Spacing (0028,0030)</li> <li>• Imager Pixel Spacing (0018,1164)</li> <li>• Nominal Scanned Pixel Spacing (0018,2010)</li> </ul>	<p><i>Default:</i></p> <p>[CADSR_Description = Physical distance in the patient between the center of each pixel, specified by a numeric pair. This attribute stores adjacent row or horizontal spacing in millimeter (mm). ]  [CURATOR REVIEWED = 1 ]  [description = Physical distance in the patient between the center of each pixel, specified by a numeric pair. This attribute stores adjacent row or horizontal spacing in millimeter (mm). ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C45786 ]  [PropertyConceptDefinition = An</p>

Attribute	Notes	Constraints and tags
		<p>intervening interval of space or time. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Spacing ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C48367 ]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C25241 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = The smallest resolvable rectangular area of an image, either on a screen or stored in memory. ]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = Parallel to or in the plane of the horizon. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Pixel ]</p> <p>[<u>PropertyQualifierConceptPreferredName2</u> = Horizontal ]</p>
<b>sliceThickness</b> REAL Private  [0..1]	Nominal slice thickness, in mm. It is a DICOM tag 0018,0050. It contains the distance that the ray used for projection of the center of the plane traveled through the volume.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = Nominal slice thickness, in mm. It is a DICOM tag 0018,0050. It contains the distance that the ray used for projection of the center of the plane traveled through the volume. ]</p> <p>[<u>CADSR_VD_ID</u> = 2803201 ]</p> <p>[<u>CADSR_VD_VERSION</u> = 1.0 ]</p> <p>[<u>CURATOR_REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = Nominal slice thickness, in mm. It is a DICOM tag 0018,0050. It contains the distance that the ray used for projection of the center of the plane traveled through the volume. ]</p> <p>[<u>OWNER_REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C41145 ]</p> <p>[<u>PropertyConceptDefinition</u> = The dimension between two surfaces of an object, usually the smallest dimension as opposed to the width or the length: also, viscous consistency. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> =</p>

Attribute	Notes	Constraints and tags
		Thickness ] <u>[PropertyQualifierConceptCode1 = C25682 ]</u> <u>[PropertyQualifierConceptDefinition1 = A thin flat piece cut off of some object; anything resembling such an object. ]</u> <u>[PropertyQualifierConceptDefinitionSource1 = NCI ]</u> <u>[PropertyQualifierConceptPreferredName1 = Slice ]</u>
<b>imagePositionX</b> REAL Private [0..1]	The Image Position specifies the x coordinate of the upper left hand corner of the image; it is the center of the first voxel transmitted.	<p><i>Default:</i></p> <p><u>[CADSR_Description = The Image Position specifies the x coordinate of the upper left hand corner of the image; it is the center of the first voxel transmitted.]</u>  <u>[CURATOR REVIEWED = 1 ]</u>  <u>[imagePositionX = The Image Position specifies the x coordinate of the upper left hand corner of the image; it is the center of the first voxel transmitted.]</u>  <u>[OWNER REVIEWED = 1 ]</u>  <u>[PropertyConceptCode = C44477 ]</u>  <u>[PropertyConceptDefinition = A horizontal coordinate that is used together with a vertical coordinate to specify an exact point in space.]</u>  <u>[PropertyConceptDefinitionSource = NCI ]</u>  <u>[PropertyConceptPreferredName = X-Coordinate ]</u>  <u>[PropertyQualifierConceptCode1 = C25341 ]</u>  <u>[PropertyQualifierConceptCode2 = C48179 ]</u>  <u>[PropertyQualifierConceptDefinition1 = A position, site, or point in space where something can be found.]</u>  <u>[PropertyQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic.]</u>  <u>[PropertyQualifierConceptDefinitionSource1 = NCI ]</u>  <u>[PropertyQualifierConceptDefinitionSource2 = NCI ]</u>  <u>[PropertyQualifierConceptPreferredName1 = Location ]</u>  <u>[PropertyQualifierConceptPreferredName2 = Image Position ]</u></p>

Attribute	Notes	Constraints and tags
<b>imagePositionY</b> REAL Private [0..1]	The Image Position specifies the y coordinate of the upper left hand corner of the image; it is the center of the first voxel transmitted.	<i>Default:</i> <u>Name2</u> = Image ]  <u>CADSR_Description</u> = The Image Position specifies the y coordinate of the upper left hand corner of the image; it is the center of the first voxel transmitted. ] <u>CURATOR REVIEWED</u> = 1 ] <u>description</u> = The Image Position specifies the y coordinate of the upper left hand corner of the image; it is the center of the first voxel transmitted. ] <u>OWNER REVIEWED</u> = 1 ] <u>PropertyConceptCode</u> = C44478 ] <u>PropertyConceptDefinition</u> = A vertical coordinate that is used together with a horizontal coordinate to specify an exact point in space. ] <u>PropertyConceptDefinitionSource</u> = NCI ] <u>PropertyConceptPreferredName</u> = Y-Coordinate ] <u>PropertyQualifierConceptCode1</u> = C25341 ] <u>PropertyQualifierConceptCode2</u> = C48179 ] <u>PropertyQualifierConceptDefinition1</u> = A position, site, or point in space where something can be found. ] <u>PropertyQualifierConceptDefinition2</u> = Any record of an imaging event whether physical or electronic. ] <u>PropertyQualifierConceptDefinitionSource1</u> = NCI ] <u>PropertyQualifierConceptDefinitionSource2</u> = NCI ] <u>PropertyQualifierConceptPreferredName1</u> = Location ] <u>PropertyQualifierConceptPreferredName2</u> = Image ]

Attribute	Notes	Constraints and tags
<b>imagePositionZ</b> REAL Private [0..1]	The Image Position specifies the z coordinate of the upper left hand corner of the image; it is the center of the first voxel transmitted.	<i>Default:</i>  [ <u>CADSR_Description</u> = The Image Position specifies the z coordinate of the upper left hand corner of the image; it is the center of the first voxel transmitted.] [ <u>CURATOR REVIEWED</u> = 1 ] [ <u>OWNER REVIEWED</u> = 1 ] [ <u>PropertyConceptCode</u> = C44479 ] [ <u>PropertyConceptDefinition</u> = A third coordinate that is used together with horizontal (x) and vertical (y) coordinates to specify an exact point in a three dimensional space.] [ <u>PropertyConceptDefinitionSource</u> = NCI ] [ <u>PropertyConceptPreferredName</u> = Z-Coordinate ] [ <u>PropertyQualifierConceptCode1</u> = C25341 ] [ <u>PropertyQualifierConceptCode2</u> = C48179 ] [ <u>PropertyQualifierConceptDefinition1</u> = A position, site, or point in space where something can be found.] [ <u>PropertyQualifierConceptDefinition2</u> = Any record of an imaging event whether physical or electronic.] [ <u>PropertyQualifierConceptDefinitionSource1</u> = NCI ] [ <u>PropertyQualifierConceptDefinitionSource2</u> = NCI ] [ <u>PropertyQualifierConceptPreferredName1</u> = Location ] [ <u>PropertyQualifierConceptPreferredName2</u> = Image ]

### Operations

Method	Notes	Parameters
<b>GetSliceThickness()</b> REAL Public	Nominal slice thickness, in mm.	
<b>SetSliceThickness()</b> void Public	Nominal slice thickness, in mm.	<b>REAL</b> [in] newVal
<b>GetHorizontalPixelSpacing()</b> REAL Public	Physical distance in the patient between the center of each pixel, specified by a numeric pair. This attribute stores adjacent row or horizontal spacing in millimeter (mm).	

Method	Notes	Parameters
	<p>All pixel spacing related attributes shall have positive non-zero values, except Physical distance in the patient between the center of each pixel, specified by a numeric pair. This attribute stores adjacent column or vertical spacing in millimeter (mm). When there is only a single row or column or pixel of data present, in which case the corresponding value may be zero. This attribute and description applies to and able to store values from:</p> <ul style="list-style-type: none"> <li>• Pixel Spacing (0028,0030)</li> <li>• Imager Pixel Spacing (0018,1164)</li> <li>• Nominal Scanned Pixel Spacing (0018,2010)</li> </ul>	
<b>GetVerticalPixelSpacing()</b> REAL Public	<p>Physical distance in the patient between the center of each pixel, specified by a numeric pair. This attribute stores adjacent column or vertical spacing in millimeter (mm).</p> <p>All pixel spacing related attributes shall have positive non-zero values, except Physical distance in the patient between the center of each pixel, specified by a numeric pair. This attribute stores adjacent column or vertical spacing in millimeter (mm). When there is only a single row or column or pixel of data present, in which case the corresponding value may be zero. This attribute and description applies to and able to store values from:</p> <ul style="list-style-type: none"> <li>• Pixel Spacing (0028,0030)</li> <li>• Imager Pixel Spacing (0018,1164)</li> <li>• Nominal Scanned Pixel Spacing (0018,2010)</li> </ul>	
<b>SetHorizontalPixelSpacincg()</b> void Public	<p>Physical distance in the patient between the center of each pixel, specified by a numeric pair. This attribute stores adjacent row or horizontal spacing in millimeter (mm).</p> <p>All pixel spacing related attributes shall have positive non-zero values, except Physical distance in the patient between the center of each pixel, specified by a numeric pair. This attribute stores adjacent column or vertical spacing in millimeter (mm). When there is only a single row or column or pixel of data present, in which case the corresponding value may be zero. This attribute and description applies to and able to store values from:</p> <ul style="list-style-type: none"> <li>• Pixel Spacing (0028,0030)</li> <li>• Imager Pixel Spacing (0018,1164)</li> <li>• Nominal Scanned Pixel Spacing (0018,2010)</li> </ul>	<b>REAL [in]</b> newVal
<b>SetVerticalPixelSpacing()</b> void	Physical distance in the patient between the center of each pixel, specified by a numeric	<b>REAL [in]</b> newVal

Method	Notes	Parameters
Public	<p>pair. This attribute stores adjacent column or vertical spacing in millimeter (mm).</p> <p>All pixel spacing related attributes shall have positive non-zero values, except Physical distance in the patient between the center of each pixel, specified by a numeric pair. This attribute stores adjacent column or vertical spacing in millimeter (mm). When there is only a single row or column or pixel of data present, in which case the corresponding value may be zero. This attribute and description applies to and able to store values from:</p> <ul style="list-style-type: none"> <li>• Pixel Spacing (0028,0030)</li> <li>• Imager Pixel Spacing (0018,1164)</li> <li>• Nominal Scanned Pixel Spacing (0018,2010)</li> </ul>	
<b>GetColumnImageOrientationX() REAL</b> Public	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store column value x\y\z. Each value is separated by "\\" backslash. The value may come from DICOM tag 0020,0037.</p>	
<b>GetRowImageOrientationX() REAL</b> Public	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store row value X. The value may come from DICOM tag 0020,0037.</p>	
<b>GetRowImageOrientationY() REAL</b> Public	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store row value Y. The value may come from DICOM tag 0020,0037.</p>	
<b>GetRowImageOrientationZ() REAL</b> Public	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p>	

Method	Notes	Parameters
	<p>y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store row value Y. The value may come from DICOM tag 0020,0037.</p>	
<b>SetColumnImageOrientationX()</b> void Public	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store column value x\y\z. Each value is separated by "\" backslash. The value may come from DICOM tag 0020,0037.</p>	<b>REAL</b> [in] newVal
<b>SetRowImageOrientationX()</b> void Public	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store row value X. The value may come from DICOM tag 0020,0037.</p>	<b>REAL</b> [in] newVal
<b>SetRowImageOrientationY()</b> void Public	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store row value Y. The value may come from DICOM tag 0020,0037.</p>	<b>REAL</b> [in] newVal
<b>SetRowImageOrientationZ()</b> void Public	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store row value Y. The value may come from DICOM tag 0020,0037.</p>	<b>REAL</b> [in] newVal
<b>GetcolumnImageOrientationY()</b> REAL Public	Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes	

Method	Notes	Parameters
	<p>shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store column value X. The value may come from DICOM tag 0020,0037.</p>	
<b>SetcolumnImageOrientationY()</b> void Public	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store column value X. The value may come from DICOM tag 0020,0037.</p>	<b>REAL</b> [in] newVal
<b>GetcolumnImageOrientationZ()</b> REAL Public	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store column value Y. The value may come from DICOM tag 0020,0037.</p>	
<b>GetImagePositionX()</b> REAL Public	The Image Position specifies the x coordinate of the upper left hand corner of the image; it is the center of the first voxel transmitted.	
<b>SetcolumnImageOrientationZ()</b> void Public	<p>Image Orientation specifies the direction cosines of the first row and the first column with respect to the patient. These Attributes shall be provide as a pair. Row value for the x, y, and z axes respectively followed by the Column value for the x, y, and z axes respectively.</p> <p>This attribute store column value Y. The value may come from DICOM tag 0020,0037.</p>	<b>REAL</b> [in] newVal
<b>SetImagePositionX()</b> void Public	The Image Position specifies the x coordinate of the upper left hand corner of the image; it is the center of the first voxel transmitted.	<b>REAL</b> [in] newVal
<b>GetImagePositionY()</b> REAL Public	The Image Position specifies the y coordinate of the upper left hand corner of the image; it is the center of the first voxel transmitted.	
<b>SetImagePositionY()</b> void Public	The Image Position specifies the y coordinate of the upper left hand corner of the image; it is	<b>REAL</b> [in] newVal

Method	Notes	Parameters
	the center of the first voxel transmitted.	
<b>GetImagePositionZ()</b> REAL Public	The Image Position specifies the z coordinate of the upper left hand corner of the image; it is the center of the first voxel transmitted.	
<b>SetImagePositionZ()</b> void Public	The Image Position specifies the z coordinate of the upper left hand corner of the image; it is the center of the first voxel transmitted.	<b>REAL</b> [in] newVal

### *ImageReferenceEntity*

Type:           **Class**     **Entity**

Status:       Proposed. Version 1.0. Phase 1.0.

Package:      AIM        **Keywords:**

Detail:        *Created on 11/9/2011. Last modified on 12/20/2011.*

GUID:        {B1C5FF8E-D8B5-48f0-A5AD-D0D31D2F27D1}

An abstract class that references the image being annotated.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = An abstract class that references the image being annotated..
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = An abstract class that references the image being annotated..
- ObjectClassConceptCode = C51070.
- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.
- ObjectClassQualifierConceptCode1 = C48294.
- ObjectClassQualifierConceptCode2 = C48179.
- ObjectClassQualifierConceptDefinition1 = Something referred to; the object of a reference..
- ObjectClassQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.

- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Reference Object.
- ObjectClassQualifierConceptPreferredName2 = Image.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public UriImageReferenceEntity	Public ImageReferenceEntity	
<b>Association</b> Bi-Directional	Private imageAnnotation ImageAnnotation	Private imageReferenceEntityCollection ImageReferenceEntity	
<b>Generalization</b> Source -> Destination	Public DicomImageReferenceEntity	Public ImageReferenceEntity	
<b>Generalization</b> Source -> Destination	Public ImageReferenceEntity	Public Entity	

***ImagingObservationEntity*****Type:**      **Class**      **Entity****Status:**      Proposed. Version 1.0. Phase 1.0.**Package:**      AIM      **Keywords:****Detail:**      *Created on 11/9/2011. Last modified on 12/20/2011.***GUID:**      {B2932AE0-E7B8-40f7-A4E8-9B7ACDB48073}

An ImagingObservationEntity is the description of things that are seen in an image. Examples include: "Mass", "Pleural Effusion", "Foreign Body", and "Artifact", are all imaging observation entity.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = A description of things that are seen in an image..
- CADSR\_Inherited.uniqueIdentifier.OWNER\_REVIEWED = 1.
- CURATOR\_REVIEWED = 1.

- documentation = A description of things that are seen in an image..
- documentation = An ImagingObservationEntity is the description of things that are seen in an image. Examples include: "Mass", "Pleural Effusion", "Foreign Body", and "Artifact", are all imaging observation entity..
- ObjectClassConceptCode = C25365.
- ObjectClassConceptDefinition = A written or verbal account, representation, statement, or explanation of something..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Description.
- ObjectClassQualifierConceptCode1 = C19477.
- ObjectClassQualifierConceptDefinition1 = Any record of a medical imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Medical Image.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b><u>Association</u></b> Bi-Directional	Private annotationEntity AnnotationEntity	Private imagingObservationEnt ityCollection ImagingObservationEnt ity	
<b><u>Generalization</u></b> Source -> Destination	Public ImagingObservationEnt ity	Public Entity	
<b><u>Association</u></b> Bi-Directional	Private imagingObservationEnt ity ImagingObservationEnt ity	Private imagingObservationCh aracteristicCollection ImagingObservationCh aracteristic	

***Attributes***

Attribute	Notes	Constraints and tags

Attribute	Notes	Constraints and tags
<b>typeCode</b> CD Private  [1..n]	Coded entry data used to describe or capture an imaging observation.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = Coded entry data used to describe or capture an imaging observation. ]  [<u>CURATOR REVIEWED</u> = 1 ]  [<u>description</u> = Coded entry data used to describe or capture an imaging observation. ]  [<u>OWNER REVIEWED</u> = 1 ]  [<u>PropertyConceptCode</u> = C93698 ]  [<u>PropertyConceptDefinition</u> = A coded value specifying an identifiable class of an entity or activity based on common qualities. ]  [<u>PropertyConceptDefinitionSource</u> = NCI ]  [<u>PropertyConceptPreferredName</u> = Type Code ]</p>
<b>questionTypeCode</b> CD Private  [0..n]	Coded entry data used to describe or capture the question being asked about imaging observation. It is associated with the typeCode.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = Coded entry data used to describe or capture the question being asked about imaging observation. It is associated with the typeCode. ]  [<u>CURATOR REVIEWED</u> = 1 ]  [<u>description</u> = Coded entry data used to describe or capture the question being asked about imaging observation. It is associated with the typeCode. ]  [<u>OWNER REVIEWED</u> = 1 ]  [<u>PropertyConceptCode</u> = C93698 ]  [<u>PropertyConceptDefinition</u> = A coded value specifying an identifiable class of an entity or activity based on common qualities. ]  [<u>PropertyConceptDefinitionSource</u> = NCI ]  [<u>PropertyConceptPreferredName</u> = Type Code ]  [<u>PropertyQualifierConceptCode1</u> = C41116 ]  [<u>PropertyQualifierConceptDefinition1</u> = A sentence of inquiry that asks for a reply; a request for information (e.g., a formal request to a database or search engine). ]  [<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p>

Attribute	Notes	Constraints and tags
		<u>[PropertyQualifierConceptPreferredName1 = Question ]</u>
<b>annotatorConfidence</b> REAL Private [0..1]	annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.	<p><i>Default:</i></p> <p><u>[CADSR_Description =</u> annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level. ]  <u>[CURATOR_REVIEWED = 1 ]</u>  <u>[description =</u> annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level. ]  <u>[OWNER_REVIEWED = 1 ]</u>  <u>[PropertyConceptCode = C49020 ]</u>  <u>[PropertyConceptDefinition =</u> The statistical calculation of the percentage likelihood for a given set of data to have a given statistical value. ]  <u>[PropertyConceptDefinitionSource = NCI ]</u>  <u>[PropertyConceptPreferredName =</u> Statistical Confidence ]  <u>[PropertyQualifierConceptCode1 = C69245 ]</u>  <u>[PropertyQualifierConceptDefinition1 =</u> The name of the individual witnessing an event. ]  <u>[PropertyQualifierConceptDefinitionSource1 = NCI ]</u>  <u>[PropertyQualifierConceptPreferredName1 = Person Observer ]</u></p>
<b>label ST</b> Private [0..1]	A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute.	<p><i>Default:</i></p> <p><u>[CADSR_Description =</u> A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute. ]  <u>[CURATOR_REVIEWED = 1 ]</u>  <u>[description =</u> A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute. ]</p>

Attribute	Notes	Constraints and tags
		<p>[OWNER REVIEWED = 1 ]  [PropertyConceptCode = C45561 ]  [PropertyConceptDefinition = A brief description given for purposes of identification; an identifying or descriptive marker that is attached to an object. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Label ]</p>
<b>comment</b> ST Private [0..1]	Free text comment	<p><i>Default:</i></p> <p>[CADSR_Description = Free text about the imaging observation not intended for rendering. ]  [CADSR_VD_ID = 2803207 ]  [CADSR_VD_VERSION = 1.0 ]  [CURATOR REVIEWED = 1 ]  [description = Free text about the imaging observation not intended for rendering. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25393 ]  [PropertyConceptDefinition = A written explanation, observation or criticism added to textual material. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Comment ]</p>
<b>isPresent</b> BL Private [0..1]	A boolean value indicates whether or not an imaging observation exist in observed image(s).	<p><i>Default:</i></p> <p>[CADSR_Description = A boolean value indicates whether or not an imaging observation exists in observed image(s). ]  [CURATOR REVIEWED = 1 ]  [description = A boolean value indicates whether or not an imaging observation exists in observed image(s). ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25626 ]  [PropertyConceptDefinition = Being or existing in a specified place or at the specified time. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Present ]  [PropertyQualifierConceptCode1 =</p>

Attribute	Notes	Constraints and tags
		<p>C45254 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = The type of an expression with two possible values, "true" and "false". Also, a variable of Boolean type or a function with Boolean arguments or result. The most common Boolean functions are AND, OR and NOT. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Boolean ]</p>
<b>questionIndex</b> INT Private [0..1]	It is used to store an index value that identifies the order of each question in an imagingObservationEntity collection.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = It is used to store an index value that identifies the order of each question in an imagingObservationEntity collection.]</p> <p>[<u>CADSR_VD_ID</u> = 2803195 ]</p> <p>[<u>CADSR_VD_VERSION</u> = 1.0 ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = It is used to store an index value that identifies the order of each question in an imagingObservationEntity collection.]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C25390 ]</p> <p>[<u>PropertyConceptDefinition</u> = A numerical scale used to compare variables with one another or with some reference number; a number used to select an element of a list, vector, array or other sequence.]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Index ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C41116 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = A sentence of inquiry that asks for a reply; a request for information (e.g., a formal request to a database or search engine). ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Question ]</p>

***Operations***

Method	Notes	Parameters
<b>GetImagingObservationCharacteristicCollection()</b> ImagingObservationCharacteristic[] Public		
<b>SetImagingObservationCharacteristicCollection()</b> void Public		<b>ImagingObservationCharacteristic[] [in]</b> imagingObservationCharacteristic
<b>GetQuestionTypeCode()</b> CD Public	Coded entry data used to describe or capture the question being asked about imaging observation. It is associated with the typeCode.	
<b>SetQuestionTypeCode()</b> void Public	Coded entry data used to describe or capture the question being asked about imaging observation. It is associated with the typeCode.	<b>CD [in]</b> newVal
<b>TypeCode()</b> CD Public	Coded entry data used to describe or capture an imaging observation.	
<b>TypeCode()</b> void Public	Coded entry data used to describe or capture an imaging observation.	<b>CD [in]</b> newVal
<b>GetAnnotatorConfidence()</b> 0 REAL Public	annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.	
<b>GetComment()</b> ST Public	Free text comment	
<b>GetIsPresent()</b> BL Public	A boolean value indicates whether or not an imaging observation exist in observed image(s).	
<b>GetQuestionIndex()</b> INT Public		
<b>SetAnnotatorConfidence()</b> void Public	annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.	<b>REAL [in]</b> newVal
<b>SetComment()</b> void Public	Free text comment	<b>ST [in]</b> newVal
<b>SetIsPresent()</b> void Public	A boolean value indicates whether or not an imaging observation exist in observed image(s).	<b>BL [in]</b> newVal
<b>SetQuestionIndex()</b> void Public		<b>INT [in]</b> newVal
<b>GetLabel()</b> ST Public	A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute.	

Method	Notes	Parameters
<b>SetLabel()</b> void Public	A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute.	<b>ST</b> [in] newVal

### *ImagingObservationCharacteristic*

*Type:*            **Class**

*Status:*        Proposed. Version 1.0. Phase 1.0.

*Package:*      AIM     *Keywords:*

*Detail:*          *Created on 11/9/2011. Last modified on 11/9/2011.*

*GUID:*            {16BE8C90-7F9B-4583-9820-5A7E7AF9FBD4}

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = ImagingObservationCharacteristic are descriptors of ImagingObservation. Example include: "spiculated", "dense", "hypoechoic", and "heterogeneous"..
- CURATOR REVIEWED = 1.
- documentation = ImagingObservationCharacteristic are descriptors of ImagingObservation. Example include: "spiculated", "dense", "hypoechoic", and "heterogeneous"..
- ObjectClassConceptCode = C25447.
- ObjectClassConceptDefinition = The distinguishing qualities or prominent aspect of a person, object, action, process, or substance..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Characteristic.
- ObjectClassQualifierConceptCode1 = C25365.
- ObjectClassQualifierConceptCode2 = C19477.
- ObjectClassQualifierConceptDefinition1 = A written or verbal account, representation, statement, or explanation of something..
- ObjectClassQualifierConceptDefinition2 = Any record of a medical imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.

- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Description.
- ObjectClassQualifierConceptPreferredName2 = Medical Image.
- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private imagingPhysicalEntity ImagingPhysicalEntity	Private imagingObservationCharacteristicCollection ImagingObservationCharacteristic	
<b>Association</b> Bi-Directional	Private imagingObservationEntity ImagingObservationEntity	Private imagingObservationCharacteristicCollection ImagingObservationCharacteristic	
<b>Association</b> Bi-Directional	Private imagingObservationCharacteristic ImagingObservationCharacteristic	Private characteristicQuantificationCollection CharacteristicQuantification	

***Attributes***

Attribute	Notes	Constraints and tags
<b>typeCode</b> CD Private [1..n]	Coded entry data used to describe or capture an imaging observation characteristic.	<p><i>Default:</i></p> <p>[CADSR_Description] = Coded entry data used to describe or capture an imaging observation characteristic. ]  [CURATOR REVIEWED = 1 ]  [description] = Coded entry data used to describe or capture an imaging observation characteristic. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C93698 ]  [PropertyConceptDefinition] = A coded value specifying an identifiable class of an entity or activity based on common qualities.  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName =</p>

Attribute	Notes	Constraints and tags
		Type Code ]
<b>questionTypeCode</b> CD Private [0..n]	Coded entry data used to describe or capture the question being asked about imaging observation characteristic. It is associated with the typeCode.	<p><i>Default:</i></p> <p>[CADSR_Description = Coded entry data used to describe or capture the question being asked about imaging observation characteristic. It is associated with the typeCode.]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[description = Coded entry data used to describe or capture the question being asked about imaging observation characteristic. It is associated with the typeCode.]</p> <p>[OWNER REVIEWED = 1]</p> <p>[PropertyConceptCode = C93698]</p> <p>[PropertyConceptDefinition = A coded value specifying an identifiable class of an entity or activity based on common qualities.]</p> <p>[PropertyConceptDefinitionSource = NCI]</p> <p>[PropertyConceptPreferredName = Type Code]</p> <p>[PropertyQualifierConceptCode1 = C41116]</p> <p>[PropertyQualifierConceptDefinition1 = A sentence of inquiry that asks for a reply; a request for information (e.g., a formal request to a database or search engine).]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI]</p> <p>[PropertyQualifierConceptPreferredName1 = Question]</p>
<b>annotatorConfidence</b> REAL Private [0..1]	annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.	<p><i>Default:</i></p> <p>[CADSR_Description = annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[description = annotatorConfidence is a real number, between 0 and 1,</p>

Attribute	Notes	Constraints and tags
		<p>indicating annotator's confidence level. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C49020 ]</p> <p>[PropertyConceptDefinition = The statistical calculation of the percentage likelihood for a given set of data to have a given statistical value. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Statistical Confidence ]</p> <p>[PropertyQualifierConceptCode1 = C69245 ]</p> <p>[PropertyQualifierConceptDefinition1 = The name of the individual witnessing an event. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Person Observer ]</p>
<b>label</b> ST Private [0..1]	A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute.	<p><i>Default:</i></p> <p>[CADSR_Description = A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C45561 ]</p> <p>[PropertyConceptDefinition = A brief description given for purposes of identification; an identifying or descriptive marker that is attached to an object. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Label ]</p>

Attribute	Notes	Constraints and tags
<b>comment</b> ST Private [0..1]	Free text comment.	<p><i>Default:</i></p> <p>[CADSR_Description = Free text about the imaging observation characteristic not intended for rendering.]            [CADSR_VD_ID = 2803207]            [CADSR_VD_VERSION = 1.0]            [CURATOR REVIEWED = 1]            [description = Free text about the imaging observation characteristic not intended for rendering.]            [OWNER REVIEWED = 1]            [PropertyConceptCode = C25393]            [PropertyConceptDefinition = A written explanation, observation or criticism added to textual material.]            [PropertyConceptDefinitionSource = NCI]            [PropertyConceptPreferredName = Comment]</p>
<b>questionIndex</b> INT Private [0..1]	It is used to store an index value that identifies the order of each question in an imagingObservationCharacteristic collection.	<p><i>Default:</i></p> <p>[CADSR_Description = It is used to store an index value that identifies the order of each question in an imagingObservationCharacteristic collection.]            [CADSR_VD_ID = 2803195]            [CADSR_VD_VERSION = 1.0]            [CURATOR REVIEWED = 1]            [description = It is used to store an index value that identifies the order of each question in an imagingObservationCharacteristic collection.]            [OWNER REVIEWED = 1]            [PropertyConceptCode = C25390]            [PropertyConceptDefinition = A numerical scale used to compare variables with one another or with some reference number; a number used to select an element of a list, vector, array or other sequence.]            [PropertyConceptDefinitionSource = NCI]            [PropertyConceptPreferredName = Index]            [PropertyQualifierConceptCode1 = C41116]            [PropertyQualifierConceptDefinition1 = A sentence of inquiry that asks for a reply; a request for information]</p>

Attribute	Notes	Constraints and tags
		(e.g., a formal request to a database or search engine). ] [PropertyQualifierConceptDefinitionSource1 = NCI ] [PropertyQualifierConceptPreferredName1 = Question ]

***Operations***

Method	Notes	Parameters
<b>GetQuestionTypeCode()</b> CD Public	Coded entry data used to describe or capture the question being asked about imaging observation characteristic. It is associated with the typeCode.	
<b>SetQuestionTypeCode()</b> void Public	Coded entry data used to describe or capture the question being asked about imaging observation characteristic. It is associated with the typeCode.	<b>CD</b> [in] newVal
<b>GetAnnotatorConfidence</b> 0 REAL Public	annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.	
<b>SetAnnotatorConfidence</b> ) void Public	annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.	<b>REAL</b> [in] newVal
<b>GetQuestionIndex()</b> INT Public	Coded entry data used to describe or capture the question being asked about imaging physical entity. It is associated with the typeCode.	
<b>SetQuestionIndex()</b> void Public	Coded entry data used to describe or capture the question being asked about imaging physical entity. It is associated with the typeCode.	<b>INT</b> [in] newVal
<b>GetComment()</b> ST Public	Free text comment	
<b>GetTypeCode()</b> CD Public	Coded entry data used to describe or capture an imaging observation characteristic.	
<b>SetComment()</b> void Public	Free text comment	<b>ST</b> [in] newVal
<b>SetTypeCode()</b> void Public	Coded entry data used to describe or capture an imaging observation characteristic.	<b>CD</b> [in] newVal
<b>GetLabel()</b> ST Public	A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute.	
<b>SetLabel()</b> void	A human readable description. It can be used to	<b>ST</b> [in] newVal

Method	Notes	Parameters
Public	store textual description of a question being asked. The question is related to questionTypeCode attribute.	
<b>GetCharacteristicQuantificationCollection()</b> CharacteristicQuantification [] Public		
<b>SetCharacteristicQuantificationCollection()</b> void Public		<b>CharacteristicQuantification []</b> [in] characteristicQuantification

### *InferenceEntity*

Type:

**Class**

**Entity**  
Status: Proposed. Version 1.0. Phase 1.0.

Package:

AIM      **Keywords:**

Detail:

Created on 11/9/2011. Last modified on 11/21/2012.

GUID:

{EC91837F-830F-4478-8F81-6C08A8B53104}

A conclusion derived by interpreting image(s) and/or other supplemental information related to the image(s) such as medical history, geographic history, etc.

### *Custom Properties*

- isActive = False

### *Tagged Values*

- CADSR\_Description = A conclusion derived by observing imaging study and/or medical history..
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = A conclusion derived by interpreting image(s) and/or other supplemental information related to the image(s) such as medical history, geographic history, etc..
- ObjectClassConceptCode = C51070.
- ObjectClassConceptDefinition = An independently existing thing (living or nonliving)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Entity.
- ObjectClassQualifierConceptCode1 = C75591.
- ObjectClassQualifierConceptDefinition1 = The process by which conclusions are derived from stated facts by the application of logical rules..

- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Inference.
- OWNER\_REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private annotationEntity AnnotationEntity	Private inferenceEntityCollecti on InferenceEntity	
<b>Generalization</b> Source -> Destination	Public InferenceEntity	Public Entity	

***Attributes***

Attribute	Notes	Constraints and tags
<b>imageEvidence BL</b> Private	A flag, if set, indicates that the inference is considered by the annotator to be ground truth.	<p><i>Default:</i></p> <p>[CADSR_Description = A flag, if set, indicates that the inference is considered by the annotator to be ground truth. ]</p> <p>[CURATOR_REVIEWED = 1 ]</p> <p>[description = A flag, if set, indicates that the inference is considered by the annotator to be ground truth. ]</p> <p>[OWNER_REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C43578 ]</p> <p>[PropertyConceptDefinition = An indicator that can be set or unset in order to signal whether a particular condition is true. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Flag ]</p> <p>[PropertyQualifierConceptCode1 = C43583 ]</p> <p>[PropertyQualifierConceptCode2 = C48179 ]</p> <p>[PropertyQualifierConceptDefinition1 = Knowledge on which to base belief. ]</p> <p>[PropertyQualifierConceptDefinition2 = Any record of an imaging event whether physical or electronic. ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyQualifierConceptDefinitionSource1 = NCI ]  [PropertyQualifierConceptDefinitionSource2 = NCI ]  [PropertyQualifierConceptPreferredName1 = Evidence ]  [PropertyQualifierConceptPreferredName2 = Image ]</p>
<b>isPresent</b> BL Private [0..1]	<p>isPresent, a boolean value indicating whether or not an inference exists in the observed image(s).</p>	<p><i>Default:</i></p> <p>[CADSR_Description = isPresent, a boolean value indicating whether or not an inference exists in the observed image(s). ]  [CURATOR REVIEWED = 1 ]  [description = isPresent, a boolean value indicating whether or not an inference exists in the observed image(s). ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C45254 ]  [PropertyConceptDefinition = The type of an expression with two possible values, "true" and "false". Also, a variable of Boolean type or a function with Boolean arguments or result. The most common Boolean functions are AND, OR and NOT. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Boolean ]  [PropertyQualifierConceptCode1 = C25626 ]  [PropertyQualifierConceptDefinition1 = Being or existing in a specified place or at the specified time. ]  [PropertyQualifierConceptDefinitionSource1 = NCI ]  [PropertyQualifierConceptPreferredName1 = Present ]</p>
<b>typeCode</b> CD Private [1..n]	<p>Coded entry data used to describe or capture an anatomic entity characteristic.</p>	<p><i>Default:</i></p> <p>[CADSR_Description = Coded entry data used to describe or capture an anatomic entity characteristic. ]  [CURATOR REVIEWED = 1 ]  [descripton = Coded entry data used to describe or capture an anatomic entity characteristic. ]</p>

Attribute	Notes	Constraints and tags
		<p>[OWNER REVIEWED = 1 ]  [PropertyConceptCode = C93698 ]  [PropertyConceptDefinition = A coded value specifying an identifiable class of an entity or activity based on common qualities.]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Type Code ]</p>
<b>questionTypeCode</b> CD Private [0..n]	Coded entry data used to describe or capture the question being asked about imaging inference. It is associated with the typeCode.	<p><i>Default:</i></p> <p>[CADSR_Description = Coded entry data used to describe or capture the question being asked about imaging inference. It is associated with the typeCode.]  [CURATOR REVIEWED = 1 ]  [description = Coded entry data used to describe or capture the question being asked about imaging inference. It is associated with the typeCode.]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C93698 ]  [PropertyConceptDefinition = A coded value specifying an identifiable class of an entity or activity based on common qualities.]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Type Code ]  [PropertyQualifierConceptCode1 = C41116 ]  [PropertyQualifierConceptDefinition1 = A sentence of inquiry that asks for a reply; a request for information (e.g., a formal request to a database or search engine).]  [PropertyQualifierConceptDefinitionSource1 = NCI ]  [PropertyQualifierConceptPreferredName1 = Question ]</p>

Attribute	Notes	Constraints and tags
<b>annotatorConfidence</b> REAL Private  [0..1]	annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.	<p><i>Default:</i></p> <p>[CADSR_Description = annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[description = annotatorConfidence is a real number, between 0 and 1, indicating annotator's confidence level.]</p> <p>[OWNER REVIEWED = 1]</p> <p>[PropertyConceptCode = C49020]</p> <p>[PropertyConceptDefinition = The statistical calculation of the percentage likelihood for a given set of data to have a given statistical value.]</p> <p>[PropertyConceptDefinitionSource = NCI]</p> <p>[PropertyConceptPreferredName = Statistical Confidence]</p> <p>[PropertyQualifierConceptCode1 = C69245]</p> <p>[PropertyQualifierConceptDefinition1 = The name of the individual witnessing an event.]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI]</p> <p>[PropertyQualifierConceptPreferredName1 = Person Observer]</p>
<b>description</b> ST Private  [0..1]	Free text describing inference not intended for rendering. It is used to provide user detail information related to a conclusion based on imaging observation and its characteristic(s).	<p><i>Default:</i></p> <p>[CADSR_Description = Free text describing inference not intended for rendering. It is used to provide user detail information related to a conclusion based on imaging observation and its characteristic(s).]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[description = Free text describing inference not intended for rendering. It is used to provide user detail information related to a conclusion based on imaging observation and its characteristic(s).]</p> <p>[OWNER REVIEWED = 1]</p> <p>[PropertyConceptCode = C25365]</p> <p>[PropertyConceptDefinition = A written or verbal account, representation, statement, or explanation of something.]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Description ]</p>
<b>label</b> ST Private [0..1]	A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute.	<p><i>Default:</i></p> <p>[CADSR_Description = A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute.]  [CURATOR REVIEWED = 1 ]  [description = A human readable description. It can be used to store textual description of a question being asked. The question is related to questionTypeCode attribute.]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C45561 ]  [PropertyConceptDefinition = A brief description given for purposes of identification; an identifying or descriptive marker that is attached to an object.]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Label ]</p>
<b>questionIndex</b> INT Private [0..1]	It is used to store an index value that identifies the order of the question in an AIM Template.	<p><i>Default:</i></p> <p>[CADSR_Description = It is used to store an index value that identifies the order of the question in an AIM Template.]  [CADSR_VD_ID = 2803195 ]  [CADSR_VD_VERSION = 1.0 ]  [CURATOR REVIEWED = 1 ]  [description = It is used to store an index value that identifies the order of the question in an AIM Template.]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25390 ]  [PropertyConceptDefinition = A numerical scale used to compare variables with one another or with some reference number; a number used to select an element of a list,</p>

Attribute	Notes	Constraints and tags
		vector, array or other sequence. ] [ <u>PropertyConceptDefinitionSource</u> = NCI ] [ <u>PropertyConceptPreferredName</u> = Index ] [ <u>PropertyQualifierConceptCode1</u> = C41116 ] [ <u>PropertyQualifierConceptDefinition1</u> = A sentence of inquiry that asks for a reply; a request for information (e.g., a formal request to a database or search engine). ] [ <u>PropertyQualifierConceptDefinitionSource1</u> = NCI ] [ <u>PropertyQualifierConceptPreferredName1</u> = Question ]
<b>comment</b> ST Private  [0..1]	Free text about the inference.	<i>Default:</i>  [ <u>CADSR_Description</u> = Free text about the inference. ] [ <u>OWNER REVIEWED</u> = 1 ] [ <u>PropertyConceptCode</u> = C25393 ] [ <u>PropertyConceptDefinition</u> = A written explanation, observation or criticism added to textual material. ] [ <u>PropertyConceptDefinitionSource</u> = NCI ] [ <u>PropertyConceptPreferredName</u> = Comment ]

***Operations***

Method	Notes	Parameters
<b>GetImageEvidence()</b> BL Public	A flag, if set, indicates that the inference is considered by the annotator to be ground truth.	
<b>SetImageEvidence()</b> void Public	A flag, if set, indicates that the inference is considered by the annotator to be ground truth.	<b>BL</b> [in] newVal
<b>GetIsPresent()</b> BL Public		
<b>GetTypeCode()</b> CD Public	Coded entry data used to describe or capture an anatomic entity characteristic.	
<b>SetIsPresent()</b> void Public		<b>BL</b> [in] newVal
<b>SetTypeCode()</b> void Public	Coded entry data used to describe or capture an anatomic entity characteristic.	<b>CD</b> [in] newVal
<b>GetAnnotatorConfidence</b> 0 REAL		

Method	Notes	Parameters
Public		
<b>GetDescription()</b> ST Public		
<b>GetQuestionTypeCode()</b> CD Public		
<b>SetAnnotatorConfidence(</b> ) void Public		<b>REAL</b> [in] newVal
<b>SetDescription()</b> void Public		<b>ST</b> [in] newVal
<b>SetQuestionTypeCode()</b> void Public		<b>CD</b> [in] newVal
<b>GetLabel()</b> ST Public		
<b>SetLabel()</b> void Public		<b>ST</b> [in] newVal
<b>GetQuestionIndex()</b> INT Public	It is used to store an index value that identifies the order of the question in an AIM Template.	
<b>SetQuestionIndex()</b> void Public	It is used to store an index value that identifies the order of the question in an AIM Template.	<b>INT</b> [in] newVal
<b>GetComment()</b> ST Public	Free text about the inference.	
<b>SetComment()</b> void Public	Free text about the inference.	<b>ST</b> [in] newVal

### Interval

**Type:** **Class** **CharacteristicQuantification**  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM **Keywords:**  
**Detail:** Created on 11/9/2011. Last modified on 1/2/2013.  
**GUID:** {DC94AC95-13AB-4c93-B7CB-9BE3A724BB30}

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = It is a set of real numbers with the property that any number that lies between two numbers that associate with operator and UCUM string..
- CADSR\_Inherited.annotatorConfidence.OWNER REVIEWED = 1.

- CADSR\_Inherited.characteristicQuantificationIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.characteristicQuantificationIndex.VD\_ID = 2803195.
- CADSR\_Inherited.characteristicQuantificationIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.comment.OWNER REVIEWED = 1.
- CADSR\_Inherited.label.OWNER REVIEWED = 1.
- CADSR\_Inherited.valueDescription.OWNER REVIEWED = 1.
- CADSR\_Inherited.valueLabel.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = It is a set of real numbers with the property that any number that lies between two numbers that associate with operator and UCUM string..
- ObjectClassConceptCode = C25543.
- ObjectClassConceptDefinition = The period of time or the distance separating two instances, events, or occurrences..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Interval.
- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public Interval	Public CharacteristicQuantification	

***Attributes***

Attribute	Notes	Constraints and tags
<b>minValue</b> REAL Private	The minimum value for that particular interval.	<i>Default:</i>  [ <u>CADSR_Description</u> = The minimum value for that particular interval. ] [ <u>CURATOR REVIEWED</u> = 1 ] [ <u>description</u> = The minimum value for that particular interval. ] [ <u>OWNER REVIEWED</u> = 1 ] [ <u>PropertyConceptCode</u> = C25712 ] [ <u>PropertyConceptDefinition</u> = A ]

Attribute	Notes	Constraints and tags
		numerical quantity measured or assigned or computed. ] [PropertyConceptDefinitionSource = NCI ] [PropertyConceptPreferredName = Value ] [PropertyQualifierConceptCode1 = C25570 ] [PropertyQualifierConceptDefinition1 = The smallest possible quantity. ] [PropertyQualifierConceptDefinitionSource1 = NCI ] [PropertyQualifierConceptPreferredName1 = Minimum ]
<b>maxValue</b> REAL Private	The maximum value for that particular interval.	Default: [CADSR_Description = The maximum value for that particular interval. ] [CURATOR REVIEWED = 1 ] [description = The maximum value for that particular interval. ] [OWNER REVIEWED = 1 ] [PropertyConceptCode = C25712 ] [PropertyConceptDefinition = A numerical quantity measured or assigned or computed. ] [PropertyConceptDefinitionSource = NCI ] [PropertyConceptPreferredName = Value ] [PropertyQualifierConceptCode1 = C25564 ] [PropertyQualifierConceptDefinition1 = The largest possible quantity or degree. ] [PropertyQualifierConceptDefinitionSource1 = NCI ] [PropertyQualifierConceptPreferredName1 = Maximum ]
<b>minOperator</b> ComparisonOperator Private	An operator represents comparison operators, i.e. >, >=, <, <=, ==, !=.	Default: [CADSR_Description = An operator represents comparison operators, i.e. >, >=, <, <=, ==, !=. ] [CURATOR REVIEWED = 1 ] [description = An operator represents comparison operators, i.e. >, >=, <, <=, ==, !=. ] [OWNER REVIEWED = 1 ] [PropertyConceptCode = C84752 ]

Attribute	Notes	Constraints and tags
		<p>[PropertyConceptDefinition = A symbol used to perform an arithmetic or logical operation. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Operator ]</p> <p>[PropertyQualifierConceptCode1 = C25570 ]</p> <p>[PropertyQualifierConceptDefinition1 = The smallest possible quantity. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Minimum ]</p>
<b>maxOperator</b> ComparisonOperator Private	An operator represents comparison operators, i.e. >, >=, <, <=, ==, !=.	<p><i>Default:</i></p> <p>[CADSR_Description = An operator represents comparison operators, i.e. &gt;, &gt;=, &lt;, &lt;=, ==, !=. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = An operator represents comparison operators, i.e. &gt;, &gt;=, &lt;, &lt;=, ==, !=. ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C84752 ]</p> <p>[PropertyConceptDefinition = A symbol used to perform an arithmetic or logical operation. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Operator ]</p> <p>[PropertyQualifierConceptCode1 = C25564 ]</p> <p>[PropertyQualifierConceptDefinition1 = The largest possible quantity or degree. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Maximum ]</p>
<b>ucumString</b> ST Private	A string representation of UCUM unit for a number in Interval.	<p><i>Default:</i></p> <p>[CADSR_Description = A string representation of UCUM unit for a number in Interval. ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = A string representation of UCUM unit for a number in Interval. ]</p>

Attribute	Notes	Constraints and tags
		<p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C45253 ]</p> <p>[PropertyConceptDefinition = An expression consisting of a linear sequence of symbols (characters or words or phrases). ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = String ]</p> <p>[PropertyQualifierConceptCode1 = C53403 ]</p> <p>[PropertyQualifierConceptDefinition1 = A code system intended to include all units of measures being contemporarily used in international science, engineering, and business. Its purpose is to facilitate unambiguous electronic communication of quantities together with their units. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Unified Code for Units of Measure ]</p>

### Operations

Method	Notes	Parameters
<b>GetMaxOperator()</b> ComparisonOperator Public	An operator represents comparison operators, i.e. >, >=, <, <=, ==, !=.	
<b>Get.MaxValue()</b> REAL Public	The maximum value for that particular interval.	
<b>GetMinOperator()</b> ComparisonOperator Public	An operator represents comparison operators, i.e. >, >=, <, <=, ==, !=.	
<b>GetUcumString()</b> ST Public	A string representation of UCUM unit for a number in Interval.	
<b>SetMaxOperator()</b> void Public	An operator represents comparison operators, i.e. >, >=, <, <=, ==, !=.	<b>ComparisonOperator</b> [in] newVal
<b>Set.MaxValue()</b> void Public	The maximum value for that particular interval.	<b>REAL</b> [in] newVal
<b>SetMinOperator()</b> void Public	An operator represents comparison operators, i.e. >, >=, <, <=, ==, !=.	<b>ComparisonOperator</b> [in] newVal
<b>SetUcumString()</b> void Public	A string representation of UCUM unit for a number in Interval.	<b>ST</b> [in] newVal

Method	Notes	Parameters
<b>GetMinValue()</b> REAL Public	The minimum value for that particular interval.	
<b>SetMinValue()</b> void Public	The minimum value for that particular interval.	<b>REAL</b> [in] newVal

### *TwoDimensionMultiPoint*

**Type:** Class **TwoDimensionGeometricShapeEntity**  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM **Keywords:**  
**Detail:** *Created on 11/9/2011. Last modified on 3/23/2012.*  
**GUID:** {04D2E4C9-18E2-4aed-8E1E-981C3888468F}

Multiple pixels each denoted by an (column,row) pair.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = Multiple pixels each denoted by an (column,row) pair..
- CADSR\_Inherited.comment.OWNER REVIEWED = 1.
- CADSR\_Inherited.description.OWNER REVIEWED = 1.
- CADSR\_Inherited.imageReferenceUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.VD\_ID = 2803169.
- CADSR\_Inherited.includeFlag.VD\_VERSION = 1.0.
- CADSR\_Inherited.interpolationMethod.OWNER REVIEWED = 1.
- CADSR\_Inherited.label.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.VD\_ID = 2803207.
- CADSR\_Inherited.lineColor.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineOpacity.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineOpacity.VD\_ID = 2803207.
- CADSR\_Inherited.lineOpacity.VD\_VERSION = 1.0.

- CADSR\_Inherited.lineStyle.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineStyle.VD\_ID = 2803207.
- CADSR\_Inherited.lineStyle.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineThickness.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineThickness.VD\_ID = 2803207.
- CADSR\_Inherited.lineThickness.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.questionIndex.VD\_ID = 2803195.
- CADSR\_Inherited.questionIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionTypeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.referencedFrameNumber.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.VD\_ID = 2803195.
- CADSR\_Inherited.shapeIdentifier.VD\_VERSION = 1.0.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.Uri.OWNER REVIEWED = 1.
- CADSR\_Inherited.uri.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = Multiple pixels each denoted by an (column, row) pair..
- ObjectClassConceptCode = C70656.
- ObjectClassConceptDefinition = The precise location of something; a spatially limited location..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Point.
- ObjectClassQualifierConceptCode1 = C17648.
- ObjectClassQualifierConceptCode2 = C48282.
- ObjectClassQualifierConceptDefinition1 = Having, relating to, or consisting of more than one individual, element, part, or other component; manifold. (dictionary.com).
- ObjectClassQualifierConceptDefinition2 = The property of being measured and described using two orthogonal directions..

- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Multiple.
- ObjectClassQualifierConceptPreferredName2 = 2-Dimensional.
- OWNER REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public TwoDimensionMultiPoint	Public TwoDimensionGeometricShapeEntity	

***NonQuantifiable***

**Type:**      Class    CharacteristicQuantification  
**Status:**     Proposed. Version 1.0. Phase 1.0.  
**Package:**    AIM      Keywords:  
**Detail:**      Created on 11/9/2011. Last modified on 1/2/2013.  
**GUID:**        {47F7D526-6E81-4ddb-ADAE-25BC4367F5FE}

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = Something that cannot be measured or counted in a scientific way..
- CADSR\_Inherited.annotatorConfidence.OWNER REVIEWED = 1.
- CADSR\_Inherited.characteristicQuantificationIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.characteristicQuantificationIndex.VD\_ID = 2803195.
- CADSR\_Inherited.characteristicQuantificationIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.comment.OWNER REVIEWED = 1.
- CADSR\_Inherited.label.OWNER REVIEWED = 1.
- CADSR\_Inherited.valueDescription.OWNER REVIEWED = 1.
- CADSR\_Inherited.valueLabel.OWNER REVIEWED = 1.

- CURATOR REVIEWED = 1.
- documentation = Something that cannot be measured or counted in a scientific way..
- ObjectClassConceptCode = C91062.
- ObjectClassConceptDefinition = The process of measuring attributes of an image, by human sense or machine observations and experiences, and mapping them into members of some set of numbers or coded concepts..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Image Quantification.
- ObjectClassQualifierConceptCode1 = C41132.
- ObjectClassQualifierConceptDefinition1 = No person or thing, nobody, not any..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = None.
- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public NonQuantifiable	Public CharacteristicQuantification	

***Attributes***

Attribute	Notes	Constraints and tags
<b>typeCode</b> CD Private	Coded entry data used to describe or capture a type of a non-quantifiable.	<p><i>Default:</i></p> <p>[CADSR_Description = Coded entry data used to describe or capture a type of a non-quantifiable. ]  [CURATOR REVIEWED = 1 ]  [description = Coded entry data used to describe or capture a type of a non-quantifiable. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C93698 ]  [PropertyConceptDefinition = A coded value specifying an identifiable class of an entity or activity based on common qualities. ]</p>

Attribute	Notes	Constraints and tags
		[PropertyConceptDefinitionSource = NCI ] [PropertyConceptPreferredName = Type Code ]

***Operations***

Method	Notes	Parameters
<b>GetTypeCode()</b> CD Public	Coded entry data used to describe or capture a type of a non-quantifiable.	
<b>SetTypeCode()</b> void Public	Coded entry data used to describe or capture a type of a non-quantifiable.	<b>CD</b> [in] newVal

***Numerical***

**Type:**           **Class**      **CharacteristicQuantification**  
**Status:**        Proposed. Version 1.0. Phase 1.0.  
**Package:**       AIM            **Keywords:**  
**Detail:**          *Created on 11/9/2011. Last modified on 1/2/2013.*  
**GUID:**            {DB5DA874-7FA6-45af-9B94-0EC91D4EF3BB}

***Custom Properties***

- isActive = False

***Tagged Values***

- CADSR\_Description = Consisting of numbers. Each number associates with an operator (e.g. <, <=, >, >=, =, etc.) and a UCUM unit. .
- CADSR\_Inherited.annotatorConfidence.OWNER REVIEWED = 1.
- CADSR\_Inherited.characteristicQuantificationIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.characteristicQuantificationIndex.VD\_ID = 2803195.
- CADSR\_Inherited.characteristicQuantificationIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.comment.OWNER REVIEWED = 1.
- CADSR\_Inherited.label.OWNER REVIEWED = 1.
- CADSR\_Inherited.valueDescription.OWNER REVIEWED = 1.

- CADSR\_Inherited.valueLabel.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = Consisting of numbers. Each number associates with an operator (e.g. <,<=,>,>=,etc.) and a UCUMunit. .
- ObjectClassConceptCode = C25337.
- ObjectClassConceptDefinition = A numeral or string of numerals expressing value, quantity, or identification..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Number.
- OWNER REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public Numerical	Public CharacteristicQuantification	

**Attributes**

Attribute	Notes	Constraints and tags
<b>ucumString</b> ST Private	A string representation of UCUM unit for a number in Numerical.	<p><i>Default:</i></p> <p>[CADSR_Description = A string representation of UCUM unit for a number in Numerical. ]  [CURATOR REVIEWED = 1 ]  [description = A string representation of UCUM unit for a number in Numerical. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C45253 ]  [PropertyConceptDefinition = An expression consisting of a linear sequence of symbols (characters or words or phrases). ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = String ]  [PropertyQualifierConceptCode1 = C53403 ]  [PropertyQualifierConceptDefinition1 = A code system intended to include all units of measures being</p>

Attribute	Notes	Constraints and tags
		<p>contemporarily used in international science, engineering, and business. Its purpose is to facilitate unambiguous electronic communication of quantities together with their units. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Unified Code for Units of Measure ]</p>
<b>value</b> REAL Private	A numeric value of a number in Numerical class.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = A numeric value of a number in Numerical class. ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = A numeric value of a number in Numerical class. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C25712 ]</p> <p>[<u>PropertyConceptDefinition</u> = A numerical quantity measured or assigned or computed. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Value ]</p>
<b>operator</b> ComparisonOperator Private  [0..1]	An operator represents comparison operators, i.e. >, >=, <, <=, ==, !=.	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = An operator represents comparison operators, i.e. &gt;, &gt;=, &lt;, &lt;=, ==, !=. ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = An operator represents comparison operators, i.e. &gt;, &gt;=, &lt;, &lt;=, ==, !=. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C54025 ]</p> <p>[<u>PropertyConceptDefinition</u> = A symbol or mathematical function that represents a specific action. For example, a plus sign (+) is an operator that represents addition. The basic mathematic operators are + addition, - subtraction,* multiplication,/ division. In addition to these opera ]</p> <p>[<u>PropertyConceptDefinition_2</u> = tors, many programs and programming languages recognize other operators that allow you to</p>

Attribute	Notes	Constraints and tags
		manipulate numbers and text in more sophisticated ways. For example, Boolean operators enable you to test the truth or falsity of conditions, and relational operator ] [PropertyConceptDefinition_3 = s let you compare one value to another.] [PropertyConceptDefinitionSource = NCI] [PropertyConceptPreferredName = Mathematical Operator]

**Operations**

Method	Notes	Parameters
<b>GetUcumString()</b> ST Public	A string representation of UCUM unit for a number in Numerical.	
<b>SetUcumString()</b> void Public	A string representation of UCUM unit for a number in Numerical.	<b>ST</b> [in] newVal
<b>GetValue()</b> REAL Public	A numeric value of a number in Numerical class.	
<b>SetValue()</b> void Public	A numeric value of a number in Numerical class.	<b>REAL</b> [in] newVal
<b>GetOperator()</b> ComparisonOperator Public	An operator represents comparison operators, i.e. >, >=, <, <=, ==, !=.	
<b>SetOperator()</b> void Public	An operator represents comparison operators, i.e. >, >=, <, <=, ==, !=.	<b>ComparisonOperator</b> [in] newVal

**Parameter****Type:** Class**Status:** Proposed. Version 1.0. Phase 1.0.**Package:** AIM      **Keywords:****Detail:** *Created on 11/9/2011. Last modified on 1/2/2013.***GUID:** {351F93F0-DDDE-4c17-AEBE-0E0CB3CF1942}

A set of structured data to be used in a calculation or computation of an algorithm.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = A set of structured data to be used in a calculation or computation of an algorithm..
- CURATOR REVIEWED = 1.
- documentation = A set of structured data to be used in a calculation or computation of an algorithm..
- ObjectClassConceptCode = C48913.
- ObjectClassConceptDefinition = A value that is passed to a routine..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Programming Parameter.
- OWNER REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Association</b> Source -> Destination	Private algorithm Algorithm	Private parameterCollection Parameter	

**Attributes**

Attribute	Notes	Constraints and tags
<b>name</b> ST Private	Name of the parameter.	<p><i>Default:</i></p> <p>[CADSR_Description = Name of the parameter. ]  [CURATOR REVIEWED = 1 ]  [description = Name of the parameter. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C42614 ]  [PropertyConceptDefinition = The words or language units by which a thing is known. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Name ]</p>
<b>value</b> ST Private	String value of a calculation. Its actual type is determined by the type attribute in this class.	<p><i>Default:</i></p> <p>[CADSR_Description = String value of a calculation. Its actual type is determined by the type attribute in this class. ]  [CURATOR REVIEWED = 1 ]  [description = String value of a calculation. Its actual type is ]</p>

Attribute	Notes	Constraints and tags
		determined by the type attribute in this class. [OWNER REVIEWED = 1] [PropertyConceptCode = C25712] [PropertyConceptDefinition = A numerical quantity measured or assigned or computed.] [PropertyConceptDefinitionSource = NCI] [PropertyConceptPreferredName = Value]
<b>dataType</b> CD Private	Coded entry data used to describe or capture a type of parameter. Coded data type can be a primitive programming data type such as integer, double, etc. as well as other data type such as URI.	<i>Default:</i> [CADSR Description = Primitive data type in a programming language such as integer, real, double, etc.] [CURATOR REVIEWED = 1] [description = Primitive data type in a programming language such as integer, real, double, etc.] [OWNER REVIEWED = 1] [PropertyConceptCode = C42645] [PropertyConceptDefinition = An indication of the form that a value will have. Examples include string, integer, and character.] [PropertyConceptDefinitionSource = NCI] [PropertyConceptPreferredName = Data Type]

**Operations**

Method	Notes	Parameters
<b>GetName()</b> ST Public		
<b>SetName()</b> void Public		ST [in] newVal
<b>GetValue()</b> ST Public		
<b>SetValue()</b> void Public		ST [in] newVal
<b>GetDataType()</b> CD Public	Coded entry data used to describe or capture a type of parameter. Coded data type can be a primitive programming data type such as integer, double, etc. as well as other data type such as URI.	
<b>SetDataType()</b> void	Coded entry data used to describe or capture a	CD [in] newVal

Method	Notes	Parameters
Public	type of parameter. Coded data type can be a primitive programming data type such as integer, double, etc. as well as other data type such as URI.	

## Person

Type: **Class**

Status: Proposed. Version 1.0. Phase 1.0.

Package: AIM      **Keywords:**

Detail: Created on 11/9/2011. Last modified on 11/21/2012.

GUID: {831B8106-E790-4c82-96CA-AD29F7DB95B1}

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = Defines the characteristics of a patient who is the subject of one or more medical studies that produce medical images..
- CURATOR REVIEWED = 1.
- documentation = Defines the characteristics of a patient who is the subject of one or more medical studies that produce medical images..
- ObjectClassConceptCode = C25190.
- ObjectClassConceptDefinition = A human being..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Person.
- OWNER REVIEWED = 1.

### Connections

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private imageAnnotation ImageAnnotationCollection	Private person Person	

***Attributes***

Attribute	Notes	Constraints and tags
<b>name</b> ST Private	The current legal name of the person registered on the clinical trial.	<p><i>Default:</i></p> <p>[CADSR_Description = The current legal name of the person registered on the clinical trial. ]  [CADSR_VD_ID = 2803207 ]  [CADSR_VD_VERSION = 1.0 ]  [CURATOR REVIEWED = 1 ]  [description = The current legal name of the person registered on the clinical trial. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C42614 ]  [PropertyConceptDefinition = The words or language units by which a thing is known. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Name ]</p>
<b>id</b> ST Private	The unique number assigned to identify a patient/participant on a protocol.	<p><i>Default:</i></p> <p>[CADSR_Description = The unique number assigned to identify a patient/participant on a protocol. ]  [CURATOR REVIEWED = 1 ]  [description = The unique number assigned to identify a patient/participant on a protocol. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25364 ]  [PropertyConceptDefinition = One or more characters used to identify, name, or characterize the nature, properties, or contents of a thing. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Identifier ]</p>
<b>birthDate</b> TS Private  [0..1]	The month, day and year on which the patient/participant was born.	<p><i>Default:</i></p> <p>[CADSR_Description = The month, day and year on which the patient/participant was born. ]  [CADSR_VD_ID = 2803209 ]  [CADSR_VD_VERSION = 1.0 ]  [CURATOR REVIEWED = 1 ]  [description = The month, day and year on which the patient/participant was born. ]  [OWNER REVIEWED = 1 ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyConceptCode = C68615 ]  [PropertyConceptDefinition = The calendar date on which a person was born. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Birth Date ]</p>
<b>sex</b> ST Private  [0..1]	Text code to represent a patient's sex determination.	<p><i>Default:</i></p> <p>[CADDRS_Description = Text code to represent a patient's sex determination. ]  [CADDRS_VD_ID = 2803207 ]  [CADDRS_VD_VERSION = 1.0 ]  [CURATOR_REVIEWED = 1 ]  [description = Text code to represent a patient's sex determination. ]  [OWNER_REVIEWED = 1 ]  [PropertyConceptCode = C17357 ]  [PropertyConceptDefinition = The assemblage of properties that distinguish people on the basis of the societal roles expected for the two sexes. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Gender ]</p>
<b>ethnicGroup</b> ST Private  [0..1]	the patient's/participant's self declared ethnic origination, independent of racial origination, based on OMB approved categories.	<p><i>Default:</i></p> <p>[CADDRS_Description = the patient's/participant's self declared ethnic origination, independent of racial origination, based on OMB approved categories. ]  [CADDRS_VD_ID = 2803207 ]  [CADDRS_VD_VERSION = 1.0 ]  [CURATOR_REVIEWED = 1 ]  [description = the patient's/participant's self declared ethnic origination, independent of racial origination, based on OMB approved categories. ]  [OWNER_REVIEWED = 1 ]  [PropertyConceptCode = C16564 ]  [PropertyConceptDefinition = A social group characterized by a distinctive social and cultural tradition that is maintained from generation to generation. Members ]</p>

Attribute	Notes	Constraints and tags
		share a common history and origin and a sense of identification with the group. They have similar and distinctive feature ] [PropertyConceptDefinition_2 = s in their lifestyle habits and shared experiences. They often have a common genetic heritage which may be reflected in their experience of health and disease. ] [PropertyConceptDefinitionSource = NCI ] [PropertyConceptPreferredName = Ethnic Group ]

*Operations*

Method	Notes	Parameters
<b>GetBirthDate()</b> TS Public	The month, day and year on which the patient/participant was born.	
<b>GetEthnicGroup()</b> ST Public	the patient's/participant's self declared ethnic origination, independent of racial origination, based on OMB approved categories.	
<b>GetId()</b> ST Public	The unique number assigned to identify a patient/participant on a protocol.	
<b>GetName()</b> ST Public	The current legal name of the person registered on the clinical trial.	
<b>GetSex()</b> ST Public	Text code to represent a patient's sex determination.	
<b>SetBirthDate()</b> void Public	The month, day and year on which the patient/participant was born.	<b>TS</b> [in] newVal
<b>SetEthnicGroup()</b> void Public	the patient's/participant's self declared ethnic origination, independent of racial origination, based on OMB approved categories.	<b>ST</b> [in] newVal
<b>SetId()</b> void Public	The unique number assigned to identify a patient/participant on a protocol.	<b>ST</b> [in] newVal
<b>SetName()</b> void Public	The current legal name of the person registered on the clinical trial.	<b>ST</b> [in] newVal
<b>SetSex()</b> void Public	Text code to represent a patient's sex determination.	<b>ST</b> [in] newVal

*TwoDimensionPolyline*

*Type:*      **Class**    **TwoDimensionGeometricShapeEntity**  
*Status:*      Proposed. Version 1.0. Phase 1.0.  
*Package:*      AIM      *Keywords:*  
*Detail:*      *Created on 11/9/2011. Last modified on 3/15/2012.*  
*GUID:*      {F2635A98-1EAD-407c-8FEA-7F19C373397C}

A series of connected line segments with ordered vertices denoted by (column, row) pairs; if the first and last vertices are the same it is a closed polygon.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = A series of connected line segments with ordered vertices denoted by pairs; if the first and last vertices are the same it is a closed polygon..
- CADSR\_Inherited.comment.OWNER REVIEWED = 1.
- CADSR\_Inherited.description.OWNER REVIEWED = 1.
- CADSR\_Inherited.imageReferenceUid.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.OWNER REVIEWED = 1.
- CADSR\_Inherited.includeFlag.VD\_ID = 2803169.
- CADSR\_Inherited.includeFlag.VD\_VERSION = 1.0.
- CADSR\_Inherited.interpolationMethod.OWNER REVIEWED = 1.
- CADSR\_Inherited.label.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineColor.VD\_ID = 2803207.
- CADSR\_Inherited.lineColor.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineOpacity.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineOpacity.VD\_ID = 2803207.
- CADSR\_Inherited.lineOpacity.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineStyle.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineStyle.VD\_ID = 2803207.
- CADSR\_Inherited.lineStyle.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineThickness.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineThickness.VD\_ID = 2803207.

- CADSR\_Inherited.lineThickness.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.questionIndex.VD\_ID = 2803195.
- CADSR\_Inherited.questionIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionTypeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.referencedFrameNumber.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.VD\_ID = 2803195.
- CADSR\_Inherited.shapeIdentifier.VD\_VERSION = 1.0.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.uri.OWNER REVIEWED = 1.
- CADSR\_Inherited.Uri.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = A series of connected line segments with ordered vertices denoted by pairs; if the first and last vertices are the same it is a closed polygon..
- ObjectClassConceptCode = C71604.
- ObjectClassConceptDefinition = A mark that is long relative to its width; a length (straight or curved) without breadth or thickness; the trace of a moving point..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Line.
- ObjectClassQualifierConceptCode1 = C17648.
- ObjectClassQualifierConceptCode2 = C48282.
- ObjectClassQualifierConceptDefinition1 = Having, relating to, or consisting of more than one individual, element, part, or other component; manifold. (dictionary.com).
- ObjectClassQualifierConceptDefinition2 = The property of being measured and described using two orthogonal directions..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Multiple.

- ObjectClassQualifierConceptPreferredName2 = 2-Dimensional.
- OWNER\_REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public TwoDimensionPolyline	Public TwoDimensionGeometricShapeEntity	

***TwoDimensionPoint***

**Type:**      **Class**    **TwoDimensionGeometricShapeEntity**  
**Status:**      Proposed. Version 1.0. Phase 1.0.  
**Package:**      AIM      **Keywords:**  
**Detail:**      *Created on 11/9/2011. Last modified on 3/15/2012.*  
**GUID:**      {648E370F-2B92-4ebc-A551-18A5B85762CC}

A single pixel denoted by a single (column,row) pair.

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = A single pixel denoted by a single (column,row) pair..
- CADSR\_Inherited.comment.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.description.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.imageReferenceUid.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.includeFlag.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.includeFlag.VD\_ID = 2803169.
- CADSR\_Inherited.includeFlag.VD\_VERSION = 1.0.
- CADSR\_Inherited.interpolationMethod.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.label.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.lineColor.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.lineColor.VD\_ID = 2803207.
- CADSR\_Inherited.lineColor.VD\_VERSION = 1.0.

- CADSR\_Inherited.lineOpacity.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineOpacity.VD\_ID = 2803207.
- CADSR\_Inherited.lineOpacity.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineStyle.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineStyle.VD\_ID = 2803207.
- CADSR\_Inherited.lineStyle.VD\_VERSION = 1.0.
- CADSR\_Inherited.lineThickness.OWNER REVIEWED = 1.
- CADSR\_Inherited.lineThickness.VD\_ID = 2803207.
- CADSR\_Inherited.lineThickness.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.questionIndex.VD\_ID = 2803195.
- CADSR\_Inherited.questionIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.questionTypeCode.OWNER REVIEWED = 1.
- CADSR\_Inherited.referencedFrameNumber.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.shapeIdentifier.VD\_ID = 2803195.
- CADSR\_Inherited.shapeIdentifier.VD\_VERSION = 1.0.
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CADSR\_Inherited.Uri.OWNER REVIEWED = 1.
- CADSR\_Inherited.uri.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = A single pixel denoted by a single (column, row) pair..
- ObjectClassConceptCode = C70656.
- ObjectClassConceptDefinition = The precise location of something; a spatially limited location..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Point.
- ObjectClassQualifierConceptCode1 = C48282.

- ObjectClassQualifierConceptDefinition1 = The property of being measured and described using two orthogonal directions..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = 2-Dimensional.
- OWNER\_REVIEWED = 1.

### Connections

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public TwoDimensionPoint	Public TwoDimensionGeometricShapeEntity	

### **Quantile**

**Type:** [Class](#)    **CharacteristicQuantification**  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM    **Keywords:**  
**Detail:** *Created on 11/9/2011. Last modified on 11/21/2012.*  
**GUID:** {37F89E67-A915-460b-A6BE-022FE72FABC8}

It is a point taken at regular interval , dividing ordered data into q essentially equal-sized data.

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = It is a point taken at regular interval , dividing ordered data into essentially equal-sized data..
- CADSR\_Inherited.annotatorConfidence.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.characteristicQuantificationIndex.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.characteristicQuantificationIndex.VD\_ID = 2803195.
- CADSR\_Inherited.characteristicQuantificationIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.comment.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.label.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.valueDescription.OWNER\_REVIEWED = 1.
- CADSR\_Inherited.valueLabel.OWNER\_REVIEWED = 1.

- CURATOR REVIEWED = 1.
- documentation = It is a point taken at regular interval , dividing ordered data into q essentially equal-sized data..
- ObjectClassConceptCode = C48920.
- ObjectClassConceptDefinition = Division of a distribution into equal, ordered subgroups; a set of 'cut points' that divide a sample of data into groups containing (as far as possible) equal numbers of observations..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Quantile.
- OWNER REVIEWED = 1.

**Connections**

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public Quantile	Public CharacteristicQuantification	

**Attributes**

Attribute	Notes	Constraints and tags
<b>bins</b> INT Private	A number representing the dividing ordered data into an equal-sized data subsets. For example, maxValue is 100. It's divided by four. Four is the value for the bins.	<p><i>Default:</i></p> <p>[CADDRS_Description] = A number representing the dividing ordered data into an equal-sized data subsets. For example, maxValue is 100. It's divided by four. Four is the value for the bins. ]  [CADSR_VD_ID = 2803195 ]  [CADSR_VD_VERSION = 1.0 ]  [CURATOR REVIEWED = 1 ]  [description] = A number representing the dividing ordered data into an equal-sized data subsets. For example, maxValue is 100. It's divided by four. Four is the value for the bins. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C63902 ]  [PropertyConceptDefinition] = An interval into which a given data point does or does not fall. ]  [PropertyConceptDefinitionSource = NCI ]</p>

Attribute	Notes	Constraints and tags
		[PropertyConceptPreferredName = Bin ]
<b>selectedBin</b> INT Private	An integer value of the selected bin.	<p><i>Default:</i></p> <p>[CADSR_Description = An integer value of the selected bin. ]  [CADSR_VD_ID = 2803195 ]  [CADSR_VD_VERSION = 1.0 ]  [CURATOR REVIEWED = 1 ]  [description = An integer value of the selected bin. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C63902 ]  [PropertyConceptDefinition = An interval into which a given data point does or does not fall. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Bin ]  [PropertyQualifierConceptCode1 = C48912 ]  [PropertyQualifierConceptDefinition1 = Select from a group. ]  [PropertyQualifierConceptDefinitionSource1 = NCI ]  [PropertyQualifierConceptPreferredName1 = Choose ]</p>
<b>minValue</b> REAL Private	Minimum value is the lowest value in a range.	<p><i>Default:</i></p> <p>[CADSR_Description = Minimum value is the lowest value in a range. ]  [CURATOR REVIEWED = 1 ]  [description = Minimum value is the lowest value in a range. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25712 ]  [PropertyConceptDefinition = A numerical quantity measured or assigned or computed. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Value ]  [PropertyQualifierConceptCode1 = C25570 ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyQualifierConceptDefinition1 = The smallest possible quantity.]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI]</p> <p>[PropertyQualifierConceptPreferredName1 = Minimum]</p>
<b>maxValue</b> REAL Private	Maximum value is the largest value in a range.	<p><i>Default:</i></p> <p>[CADSR_Description = Maximum value is the largest value in a range.]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[description = Maximum value is the largest value in a range.]</p> <p>[OWNER REVIEWED = 1]</p> <p>[PropertyConceptCode = C25712]</p> <p>[PropertyConceptDefinition = A numerical quantity measured or assigned or computed.]</p> <p>[PropertyConceptDefinitionSource = NCI]</p> <p>[PropertyConceptPreferredName = Value]</p> <p>[PropertyQualifierConceptCode1 = C25564]</p> <p>[PropertyQualifierConceptDefinition1 = The largest possible quantity or degree.]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI]</p> <p>[PropertyQualifierConceptPreferredName1 = Maximum]</p>

### Operations

Method	Notes	Parameters
<b>GetBins()</b> INT Public	A number representing the dividing ordered data into an equal-sized data subsets. For example, maxValue is 100. It's divided by four. Four is the value for the bins.	
<b>SetBins()</b> void Public	A number representing the dividing ordered data into an equal-sized data subsets. For example, maxValue is 100. It's divided by four. Four is the value for the bins.	INT [in] newVal
<b>GetSelectedBin()</b> INT Public	An integer value of the selected bin.	
<b>SetSelectedBin()</b> void Public	An integer value of the selected bin.	INT [in] newVal

Method	Notes	Parameters
<b>GetMinValue()</b> REAL Public	Minimum value is the lowest value in a range.	
<b>SetMinValue()</b> void Public	Minimum value is the lowest value in a range.	<b>REAL</b> [in] newVal
<b>GetMaxValue()</b> REAL Public	Maximum value is the largest value in a range.	
<b>SetMaxValue()</b> void Public	Maximum value is the largest value in a range.	<b>REAL</b> [in] newVal

## Scale

Type: **Class**      **CharacteristicQuantification**  
 Status: Proposed. Version 1.0. Phase 1.0.  
 Package: AIM      **Keywords:**  
 Detail: Created on 11/9/2011. Last modified on 11/21/2012.  
 G UID: {6F80EF7D-B231-44d8-AE50-BA0DC5C82132}

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = A rating scale is a set of categories designed to elicit information about a quantitative or a qualitative attribute..
- CADSR\_Inherited.annotatorConfidence.OWNER REVIEWED = 1.
- CADSR\_Inherited.characteristicQuantificationIndex.OWNER REVIEWED = 1.
- CADSR\_Inherited.characteristicQuantificationIndex.VD\_ID = 2803195.
- CADSR\_Inherited.characteristicQuantificationIndex.VD\_VERSION = 1.0.
- CADSR\_Inherited.comment.OWNER REVIEWED = 1.
- CADSR\_Inherited.label.OWNER REVIEWED = 1.
- CADSR\_Inherited.valueDescription.OWNER REVIEWED = 1.
- CADSR\_Inherited.valueLabel.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = A rating scale is a set of categories designed to elicit information about a quantitative or a qualitative attribute..
- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public Scale	Public CharacteristicQuantification	

***Attributes***

Attribute	Notes	Constraints and tags
<b>value</b> ST Private	A numerical quantity or a set of words assigned.	<p><i>Default:</i></p> <p>[CADSR_Description = A numerical quantity or a set of words assigned.]  [CURATOR REVIEWED = 1]  [description = A numerical quantity or a set of words assigned.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C25712]  [PropertyConceptDefinition = A numerical quantity measured or assigned or computed.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Value]</p>
<b>type</b> ScaleType Private	Represents different types of scales that are Nominal, Ordinal or Ratio.	<p><i>Default:</i></p> <p>[CADSR_DE_ID = 3233667]  [CADSR_DE_VERSION = 1.0]  [CADSR_Description = Represents different types of scales that are Nominal, Ordinal or Ratio.]  [CADSR_VD_ID = 3233659]  [CADSR_VD_VERSION = 1.0]  [CURATOR REVIEWED = 1]  [description = Represents different types of scales that are Nominal, Ordinal or Ratio.]  [OWNER REVIEWED = 1]</p>

***Operations***

Method	Notes	Parameters
<b>GetValue()</b> ST Public	A numerical quantity or a set of words assigned.	
<b>SetValue()</b> void	A numerical quantity or a set of words	<b>ST</b> [in] newVal

Method	Notes	Parameters
Public	assigned.	
<b>GetType()</b> ScaleType Public	Represents different types of scales that are Nominal, Ordinal or Ratio.	
<b>SetType()</b> void Public	Represents different types of scales that are Nominal, Ordinal or Ratio.	<b>ScaleType</b> [in] newVal

### *TextAnnotationEntity*

**Type:** **Class** **MarkupEntity**

**Status:** Proposed. Version 1.0. Phase 1.0.

**Package:** AIM      **Keywords:**

**Detail:** *Created on 11/9/2011. Last modified on 12/20/2011.*

**GUID:** {7FABD554-95F7-40fe-B440-8CE94A1E47E0}

TextAnnotationEntity represents the text and the markup of text intended to be rendered on the image.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = TextAnnotation represents the text and the markup of text intended to be rendered on the image..
- CADSR\_Inherited.uniqueIdentifier.OWNER REVIEWED = 1.
- CURATOR REVIEWED = 1.
- documentation = TextAnnotationEntity represents the text and the markup of text intended to be rendered on the image..
- ObjectClassConceptCode = C44272.
- ObjectClassConceptDefinition = An explanatory or critical comment, or other in-context information (e.g., pattern, motif, link), that has been associated with data or other types of information..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Annotation.
- ObjectClassQualifierConceptCode1 = C25704.
- ObjectClassQualifierConceptDefinition1 = The words of something written..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Text.

- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Association</b> Source -> Destination	Private textAnnotationEntity TextAnnotationEntity	Private geometricShapeEntity GeometricShapeEntity	
<b>Generalization</b> Source -> Destination	Public TextAnnotationEntity	Public MarkupEntity	

***Attributes***

Attribute	Notes	Constraints and tags
<b>text</b> ST Private	The text that makes up the markup.	<p><i>Default:</i></p> <p>[CADSR_Description = The text that makes up the markup.]  [CURATOR_REVIEWED = 1]  [description = The text that makes up the markup.]  [OWNER_REVIEWED = 1]  [PropertyConceptCode = C25704]  [PropertyConceptDefinition = The words of something written.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Text]</p>
<b>font</b> ST Private  [0..1]	Font type	<p><i>Default:</i></p> <p>[CADSR_Description = Type of characters of a particular typeface design.]  [CADSR_VD_ID = 2803207]  [CADSR_VD_VERSION = 1.0]  [CURATOR_REVIEWED = 1]  [description = Type of characters of a particular typeface design.]  [OWNER_REVIEWED = 1]  [PropertyConceptCode = C71594]  [PropertyConceptDefinition = A specific size and style of type within a type family.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Font]</p>

Attribute	Notes	Constraints and tags
<b>fontColor</b> ST Private [0..1]	Font color	<p><i>Default:</i></p> <p>[CADSR_Description = A color assigned to a font. Its values is assigned by RGB values from 0,0,0 to 255,255,255. ]            [CADSR_VD_ID = 2803207 ]            [CADSR_VD_VERSION = 1.0 ]            [CURATOR REVIEWED = 1 ]            [description = A color assigned to a font. Its values is assigned by RGB values from 0,0,0 to 255,255,255. ]            [OWNER REVIEWED = 1 ]            [PropertyConceptCode = C37927 ]            [PropertyConceptDefinition = The appearance of objects (or light sources) described in terms of a person's perception of their hue and lightness (or brightness) and saturation. ]            [PropertyConceptDefinitionSource = NCI ]            [PropertyConceptPreferredName = Color ]            [PropertyQualifierConceptCode1 = C71594 ]            [PropertyQualifierConceptDefinition1 = A specific size and style of type within a type family. ]            [PropertyQualifierConceptDefinitionSource1 = NCI ]            [PropertyQualifierConceptPreferredName1 = Font ]</p>
<b>fontEffect</b> ST Private [0..1]	Font effect (bold, italic, etc.)	<p><i>Default:</i></p> <p>[CADSR_Description = A special effect applied to font glyphs such as subscript, superscript, underline, strikethrough. ]            [CADSR_VD_ID = 2803207 ]            [CADSR_VD_VERSION = 1.0 ]            [CURATOR REVIEWED = 1 ]            [description = A special effect applied to font glyphs such as subscript, superscript, underline, strikethrough. ]            [OWNER REVIEWED = 1 ]            [PropertyConceptCode = C71600 ]            [PropertyConceptDefinition = An outward appearance. ]            [PropertyConceptDefinitionSource = NCI ]            [PropertyConceptPreferredName =</p>

Attribute	Notes	Constraints and tags
		Effect, Appearance ] [ <u>PropertyQualifierConceptCode1</u> = C71594 ] [ <u>PropertyQualifierConceptDefinition1</u> = A specific size and style of type within a type family. ] [ <u>PropertyQualifierConceptDefinitionSource1</u> = NCI ] [ <u>PropertyQualifierConceptPreferredName1</u> = Font ]
<b>fontSize</b> ST Private [0..1]	Font size in point	<p><i>Default:</i></p> [ <u>CADSR_Description</u> = A size of the font in point or pixel unit. ] [ <u>CADSR_VD_ID</u> = 2803207 ] [ <u>CADSR_VD_VERSION</u> = 1.0 ] [ <u>CURATOR REVIEWED</u> = 1 ] [ <u>description</u> = A size of the font in point or pixel unit. ] [ <u>OWNER REVIEWED</u> = 1 ] [ <u>PropertyConceptCode</u> = C25681 ] [ <u>PropertyConceptDefinition</u> = The physical magnitude of something. ] [ <u>PropertyConceptDefinitionSource</u> = NCI ] [ <u>PropertyConceptPreferredName</u> = Size ] [ <u>PropertyQualifierConceptCode1</u> = C71594 ] [ <u>PropertyQualifierConceptDefinition1</u> = A specific size and style of type within a type family. ] [ <u>PropertyQualifierConceptDefinitionSource1</u> = NCI ] [ <u>PropertyQualifierConceptPreferredName1</u> = Font ]
<b>fontStyle</b> ST Private [0..1]	Font style	<p><i>Default:</i></p> [ <u>CADSR_Description</u> = A property used to slant the font such as italic, normal, bold, ] [ <u>CADSR_VD_ID</u> = 2803207 ] [ <u>CADSR_VD_VERSION</u> = 1.0 ] [ <u>CURATOR REVIEWED</u> = 1 ] [ <u>description</u> = A property used to slant the font such as italic, normal, bold, ] [ <u>OWNER REVIEWED</u> = 1 ] [ <u>PropertyConceptCode</u> = C71598 ] [ <u>PropertyConceptDefinition</u> = A particular kind (as to appearance). ] [ <u>PropertyConceptDefinitionSource</u>

Attribute	Notes	Constraints and tags
		<p>= NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Style ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C71594 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = A specific size and style of type within a type family. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Font ]</p>
<b>textJustify</b> ST Private  [0..1]	Text position (Left, Right, Center)	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = Text position within a displaying area such as Left, Right, Center. ]</p> <p>[<u>CADSR_VD_ID</u> = 2803207 ]</p> <p>[<u>CADSR_VD_VERSION</u> = 1.0 ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = Text position within a displaying area such as Left, Right, Center. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p> <p>[<u>PropertyConceptCode</u> = C71595 ]</p> <p>[<u>PropertyConceptDefinition</u> = The arrangement of text so that it is aligned with either the left or right margin, or both. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Justification ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C25704 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = The words of something written. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Text ]</p>
<b>fontOpacity</b> ST Private  [0..1]	Opacity level for the font as a percentage	<p><i>Default:</i></p> <p>[<u>CADSR_Description</u> = Opacity level for the font as a percentage. ]</p> <p>[<u>CADSR_VD_ID</u> = 2803207 ]</p> <p>[<u>CADSR_VD_VERSION</u> = 1.0 ]</p> <p>[<u>CURATOR REVIEWED</u> = 1 ]</p> <p>[<u>description</u> = Opacity level for the font as a percentage. ]</p> <p>[<u>OWNER REVIEWED</u> = 1 ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyConceptCode = C71596 ]</p> <p>[PropertyConceptDefinition = The quality of being opaque to a degree; the degree to which something reduces the passage of light. ]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Opacity ]</p> <p>[PropertyQualifierConceptCode1 = C71594 ]</p> <p>[PropertyQualifierConceptDefinition1 = A specific size and style of type within a type family. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Font ]</p>

***Operations***

Method	Notes	Parameters
<b>GetFontOpacity()</b> ST Public	Opacity level for the font as a percentage	
<b>SetFontOpacity()</b> void Public	Opacity level for the font as a percentage	<b>ST</b> [in] newVal
<b>GetFontEffect()</b> ST Public	Font effect (bold, italic, etc.)	
<b>SetFontEffect()</b> void Public	Font effect (bold, italic, etc.)	<b>ST</b> [in] newVal
<b>GetFontColor()</b> ST Public	Font color	
<b>GetFontSize()</b> ST Public	Font size in point	
<b>SetFontColor()</b> void Public	Font color	<b>ST</b> [in] newVal
<b>SetFontSize()</b> void Public	Font size in point	<b>ST</b> [in] newVal
<b>GetFont()</b> ST Public	Font type	
<b>GetFontStyle()</b> ST Public	Font style	
<b>GetText()</b> ST Public	The text that makes up the markup.	
<b>GetTextJustify()</b> ST Public	Text position (Left, Right, Center)	
<b>SetFont()</b> void Public	Font type	<b>ST</b> [in] newVal

<b>Method</b>	<b>Notes</b>	<b>Parameters</b>
<b>SetFontStyle()</b> void Public	Font style	<b>ST</b> [in] newVal
<b>SetText()</b> void Public	The text that makes up the markup.	<b>ST</b> [in] newVal
<b>SetTextJustify()</b> void Public	Text position (Left, Right, Center)	<b>ST</b> [in] newVal

### *ThreeDimensionSpatialCoordinate*

*Type:*            **Class**

*Status:*        Proposed. Version 1.0. Phase 1.0.

*Package:*      AIM     *Keywords:*

*Detail:*          *Created on 11/9/2011. Last modified on 11/21/2012.*

*GUID:*            {7E7ED8BF-80B0-41f3-9E10-CA2BA70024E1}

The 3D coordinates of the shape.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = The coordinates of the points that make up the geometric shape of the region(s) of interest..
- CADSR\_Inherited.coordinateIndex.DE\_ID = 2807858.
- CADSR\_Inherited.coordinateIndex.DE\_VERSION = 1.0.
- CADSR\_Inherited.id.DE\_ID = 2750474.
- CADSR\_Inherited.id.DE\_VERSION = 1.0.
- CURATOR REVIEWED = 1.
- documentation = The 3D coordinates of the shape..
- ObjectClassConceptCode = C44465.
- ObjectClassConceptDefinition = A number or other designation that identifies a position relative to an axis or grid..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Coordinate.
- ObjectClassQualifierConceptCode1 = C18005.

- ObjectClassQualifierConceptDefinition1 = The property of being measured and described using three orthogonal directions..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = 3-Dimensional.
- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Association</b> Source -> Destination	Private threeDimensionShapeEntity ThreeDimensionGeometricShapeEntity	Private threeDimensionSpatialCoordinateCollection ThreeDimensionSpatialCoordinate	

***Attributes***

Attribute	Notes	Constraints and tags
<b>coordinateIndex INT</b> Private	The order in which a coordinate appears.	<p><i>Default:</i></p> <p>[CADSR Description] = The order in which a coordinate appears. ]  [CADSR_VD_ID = 2803195 ]  [CADSR_VD_VERSION = 1.0 ]  [CURATOR REVIEWED = 1 ]  [description] = The order in which a coordinate appears. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25390 ]  [PropertyConceptDefinition] = A numerical scale used to compare variables with one another or with some reference number; a number used to select an element of a list, vector, array or other sequence. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Index ]  [PropertyQualifierConceptCode1 = C44465 ]  [PropertyQualifierConceptDefinition1] = A number or other designation that identifies a position relative to an axis or grid. ]  [PropertyQualifierConceptDefinitionSource1 = NCI ]  [PropertyQualifierConceptPreferredName1 = Coordinate ]</p>

Attribute	Notes	Constraints and tags
<b>x</b> REAL Private	X axis value.	<p><i>Default:</i></p> <p>[CADSR_Description = X axis value.]  [CADSR_VD_ID = 2803201]  [CADSR_VD_VERSION = 1.0]  [CURATOR REVIEWED = 1]  [description = X axis value.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C44477]  [PropertyConceptDefinition = A horizontal coordinate that is used together with a vertical coordinate to specify an exact point in space.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = X-Coordinate]</p>
<b>y</b> REAL Private	Y axis value.	<p><i>Default:</i></p> <p>[CADSR_Description = Y axis value.]  [CADSR_VD_ID = 2803201]  [CADSR_VD_VERSION = 1.0]  [CURATOR REVIEWED = 1]  [description = Y axis value.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C44478]  [PropertyConceptDefinition = A vertical coordinate that is used together with a horizontal coordinate to specify an exact point in space.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Y-Coordinate]</p>

Attribute	Notes	Constraints and tags
<b>z</b> REAL Private	Z axis value.	<p><i>Default:</i></p> <p>[CADSR_Description = Z axis value.]  [CADSR_VD_ID = 2803201]  [CADSR_VD_VERSION = 1.0]  [CURATOR REVIEWED = 1]  [description = Z axis value.]  [OWNER REVIEWED = 1]  [PropertyConceptCode = C44479]  [PropertyConceptDefinition = A third coordinate that is used together with horizontal (x) and vertical (y) coordinates to specify an exact point in a three dimensional space.]  [PropertyConceptDefinitionSource = NCI]  [PropertyConceptPreferredName = Z-Coordinate]</p>

***Operations***

Method	Notes	Parameters
<b>GetX()</b> REAL Public	X axis value.	
<b>SetX()</b> void Public	X axis value.	<b>REAL</b> [in] newVal
<b>GetY()</b> REAL Public	Y axis value.	
<b>SetY()</b> void Public	Y axis value.	<b>REAL</b> [in] newVal
<b>GetCoordinateIndex()</b> INT Public	The order in which a coordinate appears.	
<b>GetZ()</b> REAL Public	Z axis value.	
<b>SetCoordinateIndex()</b> void Public	The order in which a coordinate appears.	<b>INT</b> [in] newVal
<b>SetZ()</b> void Public	Z axis value.	<b>REAL</b> [in] newVal

***TwoDimensionSpatialCoordinate***

**Type:** **Class**  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM    **Keywords:**  
**Detail:** *Created on 11/9/2011. Last modified on 3/15/2012.*  
**GUID:** {FF2ACA49-BE7C-45c3-9FD6-CD91E484C4FF}

The 2D coordinates of the shape.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = Some shapes will have 2D coordinates..
- CADSR\_Inherited.coordinateIndex.DE\_ID = 2807859.
- CADSR\_Inherited.coordinateIndex.DE\_VERSION = 1.0.
- CADSR\_Inherited.id.DE\_ID = 2750452.
- CADSR\_Inherited.id.DE\_VERSION = 1.0.
- CURATOR\_REVIEWS = 1.
- documentation = The 2D coordinates of the shape..
- ObjectClassConceptCode = C44465.
- ObjectClassConceptDefinition = A number or other designation that identifies a position relative to an axis or grid..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Coordinate.
- ObjectClassQualifierConceptCode1 = C48282.
- ObjectClassQualifierConceptDefinition1 = The property of being measured and described using two orthogonal directions..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptPreferredName1 = 2-Dimensional.
- OWNER\_REVIEWS = 1.

#### Connections

Connector	Source	Target	Notes
<b>Association</b> Source -> Destination	Private twoDimensionShapeEntity TwoDimensionGeometricShapeEntity	Private twoDimensionSpatialCoordinateCollection TwoDimensionSpatialCoordinate	

***Attributes***

Attribute	Notes	Constraints and tags
<b>coordinateIndex</b> INT Private	The order in which a coordinate appears.	<p><i>Default:</i></p> <p>[CADCSDR Description = The order in which a coordinate appears. ]  [CADCSDR_VD_ID = 2803195 ]  [CADCSDR_VD_VERSION = 1.0 ]  [CURATOR REVIEWED = 1 ]  [description = The order in which a coordinate appears. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25390 ]  [PropertyConceptDefinition = A numerical scale used to compare variables with one another or with some reference number; a number used to select an element of a list, vector, array or other sequence. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Index ]  [PropertyQualifierConceptCode1 = C44465 ]  [PropertyQualifierConceptDefinition1 = A number or other designation that identifies a position relative to an axis or grid. ]  [PropertyQualifierConceptDefinitionSource1 = NCI ]  [PropertyQualifierConceptPreferredName1 = Coordinate ]</p>
<b>x</b> REAL Private	A horizontal coordinate that is used together with a vertical coordinate to specify an exact point in space.	<p><i>Default:</i></p> <p>[CADCSDR Description = The row offset of the pixel from TLHC. ]  [CADCSDR_VD_ID = 2803201 ]  [CADCSDR_VD_VERSION = 1.0 ]  [CURATOR REVIEWED = 1 ]  [description = The row offset of the pixel from TLHC. ]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C44477 ]  [PropertyConceptDefinition = A horizontal coordinate that is used together with a vertical coordinate to specify an exact point in space. ]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = X-Coordinate ]</p>

Attribute	Notes	Constraints and tags
<b>y</b> REAL Private	Y axis value. Coordinates have to be in units of acutal pixels in the image. So, the use of normalized coordinate is not permitted, such as 0.0 to1.0.	<p><i>Default:</i></p> <p>[CADSR_Description = Y axis value. Coordinates have to be in units of acutal pixels in the image. So, the use of normalized coordinate is not permitted, such as 0.0 to1.0.]</p> <p>[CADSR_VD_ID = 2803201 ]</p> <p>[CADSR_VD_VERSION = 1.0 ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = Y axis value. Coordinates have to be in units of acutal pixels in the image. So, the use of normalized coordinate is not permitted, such as 0.0 to1.0.]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C44478 ]</p> <p>[PropertyConceptDefinition = A vertical coordinate that is used together with a horizontal coordinate to specify an exact point in space.]</p> <p>[PropertyConceptDefinitionSource = NCI ]</p> <p>[PropertyConceptPreferredName = Y-Coordinate ]</p>

***Operations***

Method	Notes	Parameters
<b>GetCoordinateIndex()</b> INT Public	The order in which a coordinate appears.	
<b>SetCoordinateIndex()</b> void Public	The order in which a coordinate appears.	INT [in] newVal
<b>GetX()</b> REAL Public		
<b>SetX()</b> void Public		REAL [in] newVal
<b>GetY()</b> REAL Public		
<b>SetY()</b> void Public		REAL [in] newVal

***UriImageReferenceEntity***

Type:           **Class**    **ImageReferenceEntity**  
 Status:         Proposed. Version 1.0. Phase 1.0.  
 Package:        AIM      Keywords:

*Detail:* Created on 11/9/2011. Last modified on 1/2/2013.

*GUID:* {CA57334A-08E5-4d40-8550-72ADB7E9BF51}

A UriImageReference is the source image for the annotation. It can be accessed via Intranet, Internet, local computer and/or file sharing systems.

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = A UriImageReference is the source image for the annotation. It can be accessed via Intranet, Internet, local computer and/or file sharing systems..
- CADSR\_Inherited.uniqueIdentifier.OWNER\_REVIEWS = 1.
- CURATOR\_REVIEWS = 1.
- documentation = A UriImageReference is the source image for the annotation. It can be accessed via Intranet, Internet, local computer and/or file sharing systems..
- ObjectClassConceptCode = C48294.
- ObjectClassConceptDefinition = Something referred to; the object of a reference..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Reference Object.
- ObjectClassQualifierConceptCode1 = C19477.
- ObjectClassQualifierConceptCode2 = C42743.
- ObjectClassQualifierConceptDefinition1 = Any record of a medical imaging event whether physical or electronic..
- ObjectClassQualifierConceptDefinition2 = The global address of documents and other resources on the World Wide Web..
- ObjectClassQualifierConceptDefinitionSource1 = NCI.
- ObjectClassQualifierConceptDefinitionSource2 = NCI.
- ObjectClassQualifierConceptPreferredName1 = Medical Image.
- ObjectClassQualifierConceptPreferredName2 = Uniform Resource Locator.
- OWNER\_REVIEWS = 1.

#### Connections

Connector	Source	Target	Notes
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Connector	Source	Target	Notes
<b>Generalization</b> Source -> Destination	Public UriImageReferenceEntity	Public ImageReferenceEntity	

**Attributes**

Attribute	Notes	Constraints and tags
<b>uri</b> ST Private	Uniform Resource Locator of the image, e.g., http://www.nic.gov, file:///home/nci/Missions.docx or file:///home/nci/JPEG.jpg.	<p><i>Default:</i></p> <p>[CADSR_Description = Uniform Resource Locator of the image, e.g., http://www.nic.gov, file:///home/nci/Missions.docx or file:///home/nci/JPEG.jpg.]</p> <p>[CADSR_VD_ID = 2803207]</p> <p>[CADSR_VD_VERSION = 1.0]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[description = Uniform Resource Locator of the image, e.g., http://www.nic.gov, file:///home/nci/Missions.docx or file:///home/nci/JPEG.jpg.]</p> <p>[OWNER REVIEWED = 1]</p> <p>[PropertyConceptCode = C42778]</p> <p>[PropertyConceptDefinition = A character string that can identify any kind of resource on the Internet, including images, text, video, audio and programs. The most common type of a URI is a URL.]</p> <p>[PropertyConceptDefinitionSource = NCI]</p> <p>[PropertyConceptPreferredName = Uniform Resource Identifier]</p>
<b>mimeType</b> ST Private	Multipurpose Internet Mail Extensions (MIME) is an Internet media type. It is used to identify content in a file on the Internet.	<p><i>Default:</i></p> <p>[CADSR_Description = Multipurpose Internet Mail Extensions (MIME) is an Internet media type. It is used to identify content in a file on the Internet.]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[description = Multipurpose Internet Mail Extensions (MIME) is an Internet media type. It is used to identify content in a file on the Internet.]</p> <p>[OWNER REVIEWED = 1]</p> <p>[PropertyConceptCode = C25284]</p> <p>[PropertyConceptDefinition = Something distinguishable as an identifiable class based on common]</p>

Attribute	Notes	Constraints and tags
		qualities. ] [ <u>PropertyConceptDefinitionSource</u> = NCI ] [ <u>PropertyConceptPreferredName</u> = Type ] [ <u>PropertyQualifierConceptCode1</u> = C74930 ] [ <u>PropertyQualifierConceptDefinition1</u> = A standard file format for transferring non-textual data over the internet. ] [ <u>PropertyQualifierConceptDefinitionSource1</u> = NCI ] [ <u>PropertyQualifierConceptPreferredName1</u> = Multipurpose Internet Mail Extensions ]

### Operations

Method	Notes	Parameters
<b>GetUri()</b> ST Public	Uniform Resource Locator of the image, e.g., http://www.nic.gov or file:///home/nci/Missions.docx.	
<b>SetUri()</b> void Public	Uniform Resource Locator of the image, e.g., http://www.nic.gov or file:///home/nci/Missions.docx.	<b>ST</b> [in] newVal
<b>GetMimeType()</b> ST Public		
<b>SetMimeType()</b> void Public		<b>ST</b> [in] newVal

### User

**Type:** Class  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** AIM      **Keywords:**  
**Detail:** *Created on 11/9/2011. Last modified on 11/9/2011.*  
**GUID:** {D66B900F-F92D-44d1-BC52-DEABA6E88276}

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = The full name of individual who is (using software) creating an annotation..

- CURATOR REVIEWED = 1.
- documentation = The full name of individual who is (using software) creating an annotation..
- ObjectClassConceptCode = C42745.
- ObjectClassConceptDefinition = An individual who uses a computer, program, network, or related service for work or entertainment..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = User.
- OWNER REVIEWED = 1.

***Connections***

Connector	Source	Target	Notes
<b>Association</b> Bi-Directional	Private annotationCollection AnnotationCollection	Private user User	

***Attributes***

Attribute	Notes	Constraints and tags
<b>name</b> ST Private	The full name of the author of the annotation.	<p><i>Default:</i></p> <p>[CADSR_Description = The full name of the author of the annotation.]  [CADSR_VD_ID = 2803207 ]  [CADSR_VD_VERSION = 1.0 ]  [CURATOR REVIEWED = 1 ]  [description = The full name of the author of the annotation.]  [OWNER REVIEWED = 1 ]  [PropertyConceptCode = C25191 ]  [PropertyConceptDefinition = A word or group of words indicating the identity of a person usually consisting of a first (personal) name and a last (family) name with an optional middle name. In some cultural traditions the family name comes first.]  [PropertyConceptDefinitionSource = NCI ]  [PropertyConceptPreferredName = Person Name ]  [PropertyQualifierConceptCode1 = C42781 ]</p>

Attribute	Notes	Constraints and tags
		<p>[PropertyQualifierConceptDefinition1 = The writer of a book, article, or other text.]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI]</p> <p>[PropertyQualifierConceptPreferredName1 = Author]</p>
<b>loginName</b> ST Private	The login name of the author on the software that is being used to create the annotation.	<p><i>Default:</i></p> <p>[CADSR_Description = The login name of the author on the software that is being used to create the annotation.]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[description = The login name of the author on the software that is being used to create the annotation.]</p> <p>[OWNER REVIEWED = 1]</p> <p>[PropertyConceptCode = C42694]</p> <p>[PropertyConceptDefinition = The account name used by a person to access a computer system.]</p> <p>[PropertyConceptDefinitionSource = NCI]</p> <p>[PropertyConceptPreferredName = Login Name]</p>
<b>roleInTrial</b> ST Private  [0..1]	The role of the author in the clinical trial, for example, "reader", or "adjudicator".	<p><i>Default:</i></p> <p>[CADSR_Description = The role of the author in the clinical trial, for example, "reader", or "adjudicator"].]</p> <p>[CADSR_VD_ID = 2803207]</p> <p>[CADSR_VD_VERSION = 1.0]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[description = The role of the author in the clinical trial, for example, "reader", or "adjudicator"].]</p> <p>[OWNER REVIEWED = 1]</p> <p>[PropertyConceptCode = C48835]</p> <p>[PropertyConceptDefinition = The usual or expected function of something; the part something plays in an action or event.]</p> <p>[PropertyConceptDefinitionSource = NCI]</p> <p>[PropertyConceptPreferredName = Role]</p> <p>[PropertyQualifierConceptCode1 = C71104]</p> <p>[PropertyQualifierConceptDefinition1 = A research study that]</p>

Attribute	Notes	Constraints and tags
		<p>prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects on health outcomes. Interventions include but are not restricted to drugs, cells and other biological products, surgical procedures, radiologic procedures, devices, behavioral treatments, process-of-care changes, and preventive care. ]</p> <p>[PropertyQualifierConceptDefinition1_2 = products, surgical procedures, radiologic procedures, devices, behavioral treatments, process-of-care changes, and preventive care. ]</p> <p>[PropertyQualifierConceptDefinitionSource1 = NCI ]</p> <p>[PropertyQualifierConceptPreferredName1 = Clinical Trial ]</p>
<b>numberWithinRoleOfClinicalTrial</b> INT Private [0..1]	An identifier assigned to the author by the clinical trial, for example, role might be "reader", and NumberWithinRole might be "42", or numberWithinRoleOfClinicalTrial might be "A12345".	<p><i>Default:</i></p> <p>[CADSR_Description = An identifier assigned to the author by the clinical trial, for example, role might be "reader", and NumberWithinRole might be "42", or numberWithinRoleOfClinicalTrial might be "A12345". ]</p> <p>[CADSR_VD_ID = 2803195 ]</p> <p>[CADSR_VD_VERSION = 1.0 ]</p> <p>[CURATOR REVIEWED = 1 ]</p> <p>[description = An identifier assigned to the author by the clinical trial, for example, role might be "reader", and NumberWithinRole might be "42", or numberWithinRoleOfClinicalTrial might be "A12345". ]</p> <p>[OWNER REVIEWED = 1 ]</p> <p>[PropertyConceptCode = C71104 ]</p> <p>[PropertyConceptDefinition = A research study that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects on health outcomes. Interventions include but are not restricted to drugs, cells and other biological products, surgical procedures, radiologic procedures, devices, behavioral treatments, process-of-care changes, and preventive care. ]</p> <p>[PropertyConceptDefinition_2 = products, surgical procedures, radiologic procedures, devices, behavioral treatments, process-of-care changes, and preventive care. ]</p>

Attribute	Notes	Constraints and tags
		<p>preventive care. ]</p> <p>[<u>PropertyConceptDefinitionSource</u> = NCI ]</p> <p>[<u>PropertyConceptPreferredName</u> = Clinical Trial ]</p> <p>[<u>PropertyQualifierConceptCode1</u> = C25199 ]</p> <p>[<u>PropertyQualifierConceptCode2</u> = C25282 ]</p> <p>[<u>PropertyQualifierConceptCode3</u> = C25337 ]</p> <p>[<u>PropertyQualifierConceptDefinition1</u> = The action or activity assigned to or required or expected of a person or group. ]</p> <p>[<u>PropertyQualifierConceptDefinition2</u> = On the inside; contained in. ]</p> <p>[<u>PropertyQualifierConceptDefinition3</u> = A numeral or string of numerals expressing value, quantity, or identification. ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource1</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource2</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptDefinitionSource3</u> = NCI ]</p> <p>[<u>PropertyQualifierConceptPreferredName1</u> = Social Role ]</p> <p>[<u>PropertyQualifierConceptPreferredName2</u> = Within ]</p> <p>[<u>PropertyQualifierConceptPreferredName3</u> = Number ]</p>

### Operations

Method	Notes	Parameters
<b>GetLoginName()</b> ST Public	The login name of the author on the software that is being used to create the annotation.	
<b>GetName()</b> ST Public	The full name of the author of the annotation.	
<b>GetNumberWithinRoleOfClinicalTrial()</b> INT Public	An identifier assigned to the author by the clinical trial, for example, role might be "reader", and NumberWithinRole might be "42", or numberWithinRoleOfClinicalTrial might be "A12345".	
<b>GetRoleInTrial()</b> ST Public	The role of the author in the clinical trial, for example, "reader", or "adjudicator".	
<b>SetLoginName()</b> void Public	The login name of the author on the software that is being used to create the annotation.	<b>ST</b> [in] newVal

<b>Method</b>	<b>Notes</b>	<b>Parameters</b>
<b>SetName()</b> void Public	The full name of the author of the annotation.	<b>ST</b> [in] newVal
<b>SetNumberWithinRoleOfClinicalTrial()</b> void Public	An identifier assigned to the author by the clinical trial, for example, role might be "reader", and NumberWithinRole might be "42", or numberWithinRoleOfClinicalTrial might be "A12345".	<b>INT</b> [in] newVal
<b>SetRoleInTrial()</b> void Public	The role of the author in the clinical trial, for example, "reader", or "adjudicator".	<b>ST</b> [in] newVal

## java

**Type:** [Package](#)  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** Logical Model  
**Detail:** *Created on 10/24/2006. Last modified on 4/25/2012*  
**GUID:** {43BAE89C-5241-4bc7-B74B-FC946B52F491}

## lang

**Type:** [Package](#)  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** java  
**Detail:** *Created on 10/24/2006. Last modified on 10/24/2006*  
**GUID:** {0CA6AD77-D114-4100-AE05-E65AB1F45D7E}

## Boolean

**Type:** [Class](#)  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** lang    **Keywords:**  
**Detail:** *Created on 10/24/2006. Last modified on 10/24/2006.*  
**GUID:** {C97D344F-72B7-4704-A8DB-7392DF5D80D0}

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = .
- CURATOR REVIEWED = 1.

- ObjectClassConceptCode = C45254.
- ObjectClassConceptDefinition = The type of an expression with two possible values, "true" and "false". Also, a variable of Boolean type or a function with Boolean arguments or result. The most common Boolean functions are AND, OR and NOT..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Boolean.
- OWNER\_REVIEWED = 0.

## Character

Type: **Class**  
Status: Proposed. Version 1.0. Phase 1.0.  
Package: lang      Keywords:  
Detail: Created on 6/18/2007. Last modified on 6/18/2007.  
GUID: {AE46712A-1AD0-4ff4-9C93-0497DFD25D8F}

## Custom Properties

- isActive = False

## Tagged Values

- CADSR\_Description = .
- CURATOR\_REVIEWED = 1.
- ObjectClassConceptCode = C68805.
- ObjectClassConceptDefinition = Any single letter, number, or symbol..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Character.
- OWNER\_REVIEWED = 0.

## Double

Type: **Class**  
Status: Proposed. Version 1.0. Phase 1.0.  
Package: lang      Keywords:  
Detail: Created on 10/24/2006. Last modified on 10/24/2006.

**GUID:** {D2DA7AC3-01F2-405e-995D-672D8DFD6E99}

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = .
- CADSR\_Description = .
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C48870.
- ObjectClassConceptDefinition = A 64-bit floating point primitive. When wrapped in an immutable Object, it is called a Double..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Double.
- OWNER REVIEWED = 0.

## Float

**Type:** **Class**

**Status:** Proposed. Version 1.0. Phase 1.0.

**Package:** lang    **Keywords:**

**Detail:** Created on 10/24/2006. Last modified on 10/24/2006.

**GUID:** {0BE8D824-9BDD-478b-A20C-613CD28C5AC4}

#### Custom Properties

- isActive = False

#### Tagged Values

- CADSR\_Description = .
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C48150.
- ObjectClassConceptDefinition = A number that can have its decimal point in any position..

- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Float.
- OWNER\_REVIEWED = 0.

## Integer

Type: **Class**

Status: Proposed. Version 1.0. Phase 1.0.

Package: lang    **Keywords:**

Detail: Created on 10/24/2006. Last modified on 10/24/2006.

GUID: {61D84993-837B-48c3-9F63-E3020F52FA13}

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_Description = .
- CURATOR\_REVIEWED = 1.
- ObjectClassConceptCode = C45255.
- ObjectClassConceptDefinition = A number with no fractional part, including the negative and positive numbers as well as zero..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Integer.
- OWNER\_REVIEWED = 0.

## Long

Type: **Class**

Status: Proposed. Version 1.0. Phase 1.0.

Package: lang    **Keywords:**

Detail: Created on 6/18/2007. Last modified on 6/18/2007.

GUID: {1C629429-347E-4f3f-8D5A-E52B555F406C}

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = .
- CADSR\_Description = .
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C48311.
- ObjectClassConceptDefinition = A variable that is stored as a signed 64-bit (8-byte) integer..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Long.
- OWNER REVIEWED = 0.

**String**

Type: **Class**

Status: Proposed. Version 1.0. Phase 1.0.

Package: lang      **Keywords:**

Detail: *Created on 10/24/2006. Last modified on 10/24/2006.*

GUID: {D1A51FE0-90DA-4977-B520-F3A871CBA44E}

**Custom Properties**

- isActive = False

**Tagged Values**

- CADSR\_Description = .
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C45253.
- ObjectClassConceptDefinition = An expression consisting of a linear sequence of symbols (characters or words or phrases)..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = String.

- OWNER REVIEWED = 0.

## ***util***

*Type:* **Package**  
*Status:* Proposed. Version 1.0. Phase 1.0.  
*Package:* java  
*Detail:* *Created on 10/24/2006. Last modified on 10/24/2006*  
*GUID:* {65413A3A-338B-4a5c-96B7-B456DA3809A1}

## **Date**

*Type:* **Class**  
*Status:* Proposed. Version 1.0. Phase 1.0.  
*Package:* util *Keywords:*  
*Detail:* *Created on 10/24/2006. Last modified on 10/24/2006.*  
*GUID:* {D50C9E68-E240-456a-A166-F1706281B491}

## **Custom Properties**

- isActive = False

## **Tagged Values**

- CADSR\_Description = .
- CADSR\_Description = .
- CURATOR REVIEWED = 1.
- ObjectClassConceptCode = C48871.
- ObjectClassConceptDefinition = A string unique to a time duration of 24 hours between 2 successive midnights defined by the local time zone. The specific representation of a date will depend on which calendar convention is in force as well as local ordering conventions..
- ObjectClassConceptDefinitionSource = NCI.
- ObjectClassConceptPreferredName = Date Data Type.
- OWNER REVIEWED = 0.

## **ValueDomain**

**Type:** **Package**  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** Logical Model  
**Detail:** *Created on 6/26/2009. Last modified on 4/25/2012*  
**GUID:** {4F892632-CBF8-41da-97EA-AC578BD2BD7C}

## AimVersion

**Type:** **Class**  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** ValueDomain **Keywords:**  
**Detail:** *Created on 5/24/2011. Last modified on 12/18/2011.*  
**GUID:** {4EEC7161-3F57-40a7-8B20-E67FCCB6F62F}

Define public valid AIM versions.

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_VD\_ID = 3423518.
- CADSR\_VD\_VERSION = 1.0.
- CURATOR REVIEWED = 0.
- documentation = It defines valid official AIM versions..
- OWNER REVIEWED = 1.

### Attributes

Attribute	Notes	Constraints and tags
<b>AIMv1_0</b> ST Private		<p><i>Default:</i></p> <p>[CADSR_Description = AIM version 1.0 ]  [CURATOR REVIEWED = 0 ]  [OWNER REVIEWED = 0 ]</p>
<b>AIMv2_0</b> ST Private		<p><i>Default:</i></p> <p>[CADSR_Description = AIM version 2.0 ]  [CURATOR REVIEWED = 0 ]  [OWNER REVIEWED = 0 ]</p>

Attribute	Notes	Constraints and tags
<b>AIMv3_0_1</b> ST Private		<p><i>Default:</i></p> <p>[CADSR_Description = AIM version 3.0.1 ]  [CURATOR REVIEWED = 0 ]  [OWNER REVIEWED = 0 ]</p>
<b>AIMv3_0_2</b> ST Private		<p><i>Default:</i></p> <p>[CADSR_Description = AIM version 3.0.2 ]  [CURATOR REVIEWED = 0 ]  [OWNER REVIEWED = 0 ]</p>
<b>AIMv4_0</b> ST Private		<p><i>Default:</i></p> <p>[CADSR_Description = AIM version 4.0 ]  [CURATOR REVIEWED = 0 ]  [OWNER REVIEWED = 0 ]</p>

## ***CalculationResultIdentifier***

Type: **Class**

Status: Proposed. Version 1.0. Phase 1.0.

Package: ValueDomain      **Keywords:**

Detail: *Created on 12/19/2007. Last modified on 3/23/2011.*

GUID: {874F11ED-3F51-4df9-93A4-ABCB1C66C0F7}

### **Custom Properties**

- isActive = False

### **Tagged Values**

- CADSR\_VD\_ID = 2753188.
- CADSR\_VD\_VERSION = 2.1.
- CURATOR\_REVIEWED = 1.
- documentation = The type of result, for example, scalar, vector, histogram or array..
- OWNER\_REVIEWED = 1.

***Attributes***

Attribute	Notes	Constraints and tags
<b>Array ST</b> Private	Array	<p><i>Default:</i></p> <p>[CADSR_Description = Array ]  [CURATOR REVIEWED = 1 ]  [description = Array ]  [OWNER REVIEWED = 1 ]  [ValueMeaningConceptCode = C26358 ]  [ValueMeaningConceptDefinition = An orderly arrangement. ]  [ValueMeaningConceptDefinitionSource = NCI ]  [ValueMeaningConceptPreferredName = Array ]</p>
<b>Binary ST</b> Private		<p><i>Default:</i></p> <p>[CADSR_Description = Information is stored in a collection of 0 and 1. ]  [CURATOR REVIEWED = 0 ]  [OWNER REVIEWED = 0 ]  [ValueMeaningConceptCode = C45969 ]  [ValueMeaningConceptDefinition = Consisting of two (e.g., units, components, elements, terms, possibilities) or based on two. ]  [ValueMeaningConceptDefinitionSource = NCI ]  [ValueMeaningConceptPreferredName = Binary ]</p>
<b>Histogram ST</b> Private	Histogram	<p><i>Default:</i></p> <p>[CADSR_Description = Histogram ]  [CURATOR REVIEWED = 1 ]  [description = Histogram ]  [OWNER REVIEWED = 1 ]  [ValueMeaningConceptCode = C71615 ]  [ValueMeaningConceptDefinition = A bar chart representing a frequency distribution where the heights of the bars represent observed frequencies. ]  [ValueMeaningConceptDefinitionSource = NCI ]  [ValueMeaningConceptPreferredName = Histogram ]</p>

Attribute	Notes	Constraints and tags
<b>Matrix ST</b> Private	Metrix	<p><i>Default:</i></p> <p>[CADSR_Description = Metrix ]  [CURATOR REVIEWED = 1 ]  [description = Metrix ]  [OWNER REVIEWED = 1 ]  [ValueMeaningConceptCode = C45802 ]  [ValueMeaningConceptDefinition = A rectangular array of elements (or entries) set out by rows and columns. ]  [ValueMeaningConceptDefinitionSource = NCI ]  [ValueMeaningConceptPreferredName = Matrix ]</p>
<b>Scalar ST</b> Private	Scalar	<p><i>Default:</i></p> <p>[CADSR_Description = Scalar ]  [CURATOR REVIEWED = 1 ]  [description = Scalar ]  [OWNER REVIEWED = 1 ]  [ValueMeaningConceptCode = C47839 ]  [ValueMeaningConceptDefinition = Any data type that stores a single value (e.g. a number or Boolean), as opposed to an aggregate data type that has many elements. ]  [ValueMeaningConceptDefinitionSource = NCI ]  [ValueMeaningConceptPreferredName = Scalar ]</p>
<b>Vector ST</b> Private	Vector	<p><i>Default:</i></p> <p>[CADSR_Description = Vector ]  [CURATOR REVIEWED = 1 ]  [description = Vector ]  [OWNER REVIEWED = 1 ]  [ValueMeaningConceptCode = C54169 ]  [ValueMeaningConceptDefinition = A single dimensional array. ]  [ValueMeaningConceptDefinitionSource = NCI ]</p>

Attribute	Notes	Constraints and tags
		<u>ource</u> = NCI ] [ValueMeaningConceptPreferredNa me = Vector ]

## ComparisonOperator

**Type:** Class  
**Status:** Proposed. Version 1.0. Phase 1.0.  
**Package:** ValueDomain      **Keywords:**  
**Detail:** *Created on 4/29/2010. Last modified on 3/23/2011.*  
**GUID:** {19C96A37-5426-420b-B58F-428756A1FBD2}

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_VD\_ID = 3423502.
- CADSR\_VD\_VERSION = 1.0.
- CURATOR REVIEWED = 1.
- documentation = This class defines a list of valid comparison operators ranging from =, <>, <, >, <= and >=..
- OWNER REVIEWED = 1.

### Attributes

Attribute	Notes	Constraints and tags
Equal ST Private	equal	<p><i>Default:</i></p> <p>[CADSR_Description = A comparison concept of two things being quantitatively or qualitatively the same. ]            [CURATOR REVIEWED = 1 ]            [OWNER REVIEWED = 1 ]            [ValueMeaningConceptCode = C61582 ]</p>

Attribute	Notes	Constraints and tags
		<p>[ValueMeaningConceptDefinition = The quality of being the same in quantity or measure or value or status.]</p> <p>[ValueMeaningConceptDefinitionSource = NCI]</p> <p>[ValueMeaningConceptPreferredName = Equality]</p>
<b>NotEqual</b> ST Private	not equal	<p><i>Default:</i></p> <p>[CADSR_Description = A comparison concept of two things being quantitatively or qualitatively not the same.]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[OWNER REVIEWED = 1]</p> <p>[ValueMeaningConceptCode = C91406]</p> <p>[ValueMeaningConceptDefinition = The condition of not being equal.]</p> <p>[ValueMeaningConceptDefinitionSource = NCI]</p> <p>[ValueMeaningConceptPreferredName = Inequality]</p>
<b>LessThan</b> ST Private	less than	<p><i>Default:</i></p> <p>[CADSR_Description = A comparison concept of two things whereby one thing has smaller value than the other thing.]</p> <p>[CURATOR REVIEWED = 1]</p> <p>[OWNER REVIEWED = 1]</p> <p>[ValueMeaningConceptCode = C61585]</p> <p>[ValueMeaningConceptDefinition = A statement about the relative size or order of two objects specifying that an object of interest is smaller than another object in quantity or measure or value or status.]</p> <p>[ValueMeaningConceptDefinitionSource = NCI]</p> <p>[ValueMeaningConceptPreferredName = Less Than]</p>

Attribute	Notes	Constraints and tags
<b>GreaterThan</b> ST Private	greater than	<p><i>Default:</i></p> <p>[CADSR_Description = A comparison concept of two things whereby one thing has more value than the other thing.]  [CURATOR REVIEWED = 1]  [OWNER REVIEWED = 1]  [ValueMeaningConceptCode = C61584]  [ValueMeaningConceptDefinition = A statement about the relative size or order of two objects specifying that an object of interest exceeds another object in quantity or measure or value or status.]  [ValueMeaningConceptDefinitionSource = NCI]  [ValueMeaningConceptPreferredName = Greater Than]</p>
<b>LessThanEqual</b> ST Private	less than equal	<p><i>Default:</i></p> <p>[CADSR_Description = A comparison concept of two things whereby one thing has smaller or equal value than the other thing.]  [CURATOR REVIEWED = 1]  [OWNER REVIEWED = 1]  [ValueMeaningConceptCode = C61586]  [ValueMeaningConceptDefinition = A statement about the relative size or order of two objects specifying that either both objects are the same in quantity or measure or value or status or that the object of interest is smaller than the other object in one of these ways.]  [ValueMeaningConceptDefinitionSource = NCI]  [ValueMeaningConceptPreferredName = Less Than or Equal To]</p>
<b>GreaterThanOrEqualTo</b> ST Private	greater than equal	<p><i>Default:</i></p> <p>[CADSR_Description = A comparison concept of two things whereby one thing has more or equal value than the other thing.]  [CURATOR REVIEWED = 1]  [OWNER REVIEWED = 1]  [ValueMeaningConceptCode = C61583]</p>

Attribute	Notes	Constraints and tags
		[ValueMeaningConceptDefinition = A statement about the relative size or order of two objects specifying that either both objects are the same in quantity or measure or value or status or that the object of interest exceeds the other object in one of these ways. ] [ValueMeaningConceptDefinitionSource = NCI ] [ValueMeaningConceptPreferredName = Greater Than or Equal To ]

## ScaleType

Type: **Class**

Status: Proposed. Version 1.0. Phase 1.0.

Package: ValueDomain      *Keywords:*

Detail: Created on 4/29/2010. Last modified on 3/23/2011.

GUID: {A5BF4901-5DCE-4f3f-9A02-832188097D95}

### Custom Properties

- isActive = False

### Tagged Values

- CADSR\_VD\_ID = 3430886.
- CADSR\_VD\_VERSION = 1.0.
- CURATOR REVIEWED = 1.
- documentation = The class defines types of scales that are nominal, ordinal and ratio..
- OWNER REVIEWED = 1.

### Attributes

Attribute	Notes	Constraints and tags
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<b>Attribute</b>	<b>Notes</b>	<b>Constraints and tags</b>
<b>Nominal ST</b> Private	Nominal scale consists of classifying things to groups or categories. No quantitative information is conveyed. Ordering has no meaning in this scale. Nominal scales are therefore qualitative. Sex and race are all examples of nominal scales.	<p><i>Default:</i></p> <p>[CURATOR REVIEWED = 0 ]  [description = Nominal scale  consists of classifying things to  groups or categories. No  quantitative information is  conveyed. Ordering has no meaning  in this scale. Nominal scales are  therefore qualitative. Sex and race  are all examples of nominal scales. ]  [OWNER REVIEWED = 0 ]</p>
<b>Ordinal ST</b> Private	Ordinal scale is a classification system whereby a number assigned to an item in a group has qualitative value.	<p><i>Default:</i></p> <p>[CURATOR REVIEWED = 0 ]  [description = Ordinal scale is a  classification system whereby a  number assigned to an item in a  group has qualitative value. ]  [OWNER REVIEWED = 0 ]</p>
<b>Ratio ST</b> Private	Ratio scale is an interval scale that associates with a zero origin in a categories or groups. For example, first category is 0-10 and the second category must be 11-20.	<p><i>Default:</i></p> <p>[CURATOR REVIEWED = 0 ]  [description = Ratio scale is an  interval scale that associates with a  zero origin in a categories or groups.  For example, first category is 0-10  and the second category must be  11-20.  ]  [OWNER REVIEWED = 0 ]</p>