



# Updates on Collaboration with RSNA

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# Main Deliverables

Developing a Unified Model for Radiology  
Procedure Names

Mapping the attribute-values between each  
terminology (i.e. LOINC Parts to RadLex RIDs)

Mapping between RadLex RPIDs and LOINC codes

# Process

Model unification reviewed all modalities

Attributes can employ a syntax

Have made excellent progress on resolving issues  
(always a few remaining edge cases)

Developed a “User Guide” covering all attributes:  
definitions, usage notes, and identifying weird stuff

Mapping focus progressing through modalities

Ongoing discussion  
about use of **Body**  
**Region** attribute

Entire area scanned vs.

A broad roll-up category vs.

Forget about it

# Complete Attribute Set

## **Modality**

Modality

Modality.Subtype

## **Anatomy**

Anatomic Location.Region Imaged

Anatomic Location.Imaging Focus

Anatomic Location.Laterality.Presence

Anatomic Location.Laterality

## **View**

View.Maneuver

View.Aggregation

View.Modifiers

## **Pharmaceutical**

Pharmaceutical.Substance Given

Pharmaceutical.Route

Pharmaceutical.Timing

## **Guidance**

Guidance for.Presence

Guidance for.Approach

Guidance for.Action

Guidance for.Object

## **Reason for Exam**

## **Subject**

# Annex in LOINC Users' Guide

## Annex - RadLex-LOINC Radiology Playbook User Guide

Welcome to the RadLex-LOINC Radiology Playbook User Guide. This work is the result of a multi-year collaboration between Regenstrief Institute and the Radiological Society of North America (RSNA), supported by the National Institute of Biomedical Imaging and Bioengineering (NIBIB). The participants have developed a model that combines and unifies the useful aspects of LOINC Radiology and the RSNA RadLex Playbook. Both of these terminology initiatives are designed to represent concepts of radiology orderables and results and their attributes.

Each term in the unified Playbook model has a name or description, and takes on a number of attributes. This guide is intended to describe the semantics, syntax, and proper usage of those attributes. The attributes are generally concatenated to form an automated name for each term. In addition, each code also has a manually-created long description and short description (less than 30 characters).

A list of the Playbook attributes is shown below. Attributes are organized according to attribute groups, consisting of the major bullet headings below, and by more specific sub-attributes, shown in the minor bullets below and denoted by a dot after the attribute group, such as *Pharmaceutical.Route*.

- *Modality*
  - *Modality*
  - *Modality.Subtype*
- *Anatomic Location*
  - *Anatomic Location.Region Imaged*
  - *Anatomic Location.Imaging Focus*
  - *Anatomic Location.Laterality.Presence*
  - *Anatomic Location.Laterality*
- *View*
  - *View.Maneuver*
  - *View.Aggregation*
- *Pharmaceutical*
  - *Pharmaceutical.Substance Given*
  - *Pharmaceutical.Route*
  - *Pharmaceutical.Timing*
- *Reason for Exam*
- *Guidance*
  - *Guidance for.presence*
  - *Guidance for.approach*
  - *Guidance for.action*
  - *Guidance for.object*
- *Subject*

The chapters that follow provide a guide to the usage of each of the above attributes.

# Feedback Welcome

# CT Names Changed in LOINC 2.54

Many changes to CT terms in the latest LOINC release

Example of new style anatomy:

24814-6 Abdomen>Liver CT

# Accessory File Format

LOINC	LOINC Long Common Name	PartNumber	PartName	PartType	PartSeq Order	RID	PreferredName	RPID	LongName
24628-0	Chest CT W contrast IV	LP200088-5	Rad.Pharmaceutical.Timing	W	1	RID49853	W	RPID18	CT Chest w IV Contrast
24628-0	Chest CT W contrast IV	LP200085-1	Rad.Pharmaceutical.Substance Given	Contrast	1	RID11582	Contrast agent	RPID18	CT Chest w IV Contrast
24628-0	Chest CT W contrast IV	LP200078-6	Rad.Pharmaceutical.Route	IV	1	RID11160	intravenous	RPID18	CT Chest w IV Contrast
24628-0	Chest CT W contrast IV	LP199962-4	Rad.Anatomic Location.Region Imaged	Chest	1	RID1243	Thorax	RPID18	CT Chest w IV Contrast
24628-0	Chest CT W contrast IV	LP200067-9	Rad.Modality	CT	1	RID10321	computed tomography	RPID18	CT Chest w IV Contrast
24628-0	Chest CT W contrast IV	LP200088-5	Rad.Pharmaceutical.Timing	W	1	RID49853	W	RPID18	CT Chest w IV Contrast



**Governance**

# Main Deliverables

Integrated governance process for new terms

Creating single point-of-contact and governance structure for the unified terminology

New joint LOINC/RadLex Committee to be advisory body (*Approved at Clinical LOINC Meeting 02/2014*)

LOINC codes as the primary identifier for radiology procedures (e.g. the universal codes) while linking to the RadLex attribute/values for each term so that they can be used as meta-data

Agreement covering IP issues, non-duplication, etc was signed by RSNA and Regenstrief in September 2015.

# Distribution Artifacts

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LOINC Table, RELMA (Regenstrief)

As is today

LOINC RSNA Playbook Table (Regenstrief)

December 2015 LOINC release

Will be expanded with other modalities as completed

RadLex Playbook Table (RSNA)

Format determined by RSNA

New format for Version 2 (learned a lot from LOINC)

Includes “EXPORTED\_TO\_LOINC” attribute that points people to LOINC as we complete our work