

1	Status	Letter Ballot
2	Date of Last Update	2024/03/21
3	Person Assigned	David Clunie
4		mailto:dclunie@dclunie.com
5	Submitter Name	Andrey Fedorov
6		mailto:andrey.fedorov@gmail.com
7	Submission Date	2023/05/24

8	Correction Number CP-2355	
9	Log Summary: Refactor lung anatomy context groups	
10	Name of Standard	
11	PS3.6, PS3.16	
12	Rationale for Correction:	
13	The lung anatomy concepts used in lung CAD templates and for segmentation are duplicated in various context groups used	
14	inconsistently. Factor out the commonality.	
15	The DCM code for sub-pleural is retired and replaced with SCT:68599007 "Structure of subpleural tissue (body structure)".	
16	<i>[Ed.Note.: SNOMED CRS ID#nnnnn to add 68599007 to DICOM subset.]</i>	
17	<i>[Ed. Note: The context group versions are not changed during refactoring if the actual content does not change.]</i>	
18	Correction Wording:	

Amend DICOM PS3.16 as follows (changes to existing text are bold and underlined for additions and ~~struckthrough~~ for removals):

CID 6126 Location in Lung

Version: 20210328

Table CID 6126. Location in Lung

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	281392002	Upper zone of lung	T-D3208	G0559286
SCT	281393007	Middle zone of lung	T-D3209	G0559287
SCT	281394004	Lower zone of lung	T-D320A	G0559288
<u>Include CID ccc2 "Zone of Lung"</u>				
SCT	<u>45653009</u>	<u>Upper lobe of lung</u>	<u>T-28820</u>	<u>G0225756</u>
SCT	<u>72484006</u>	<u>Middle lobe of right lung</u>	<u>T-28300</u>	<u>G4284590</u>
SCT	<u>90572004</u>	<u>Lower lobe of lung</u>	<u>T-28830</u>	<u>G0225758</u>
<u>Include CID ccc1 "Lobe of Lung"</u>				
BGMSCT	442453 <u>59820001</u>	Subpleural		C0225775

CID 7155 Thoracic Segmentation Type

Version: 20200704

Table CID 7155. Thoracic Segmentation Type

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	59820001	Blood Vessel	T-40000	C0005847
SCT	272710004	Bone of thorax	T-D0170	C0448157
SCT	955009	Bronchus	T-26000	C0006255
SCT	43799004	Chest cavity	T-D3200	C0230139
SCT	372074006	Chest wall muscle	T-14122	C1269825
SCT	51299004	Clavicle	T-12310	C0008913
SCT	5798000	Diaphragm	T-D3400	C0011980
SCT	32849002	Esophagus	T-56000	C0014876
SCT	90572004	Lower lobe of lung	T-28830	G0225758
SCT	39607008	Lung	T-28000	C0024109
SCT	72410000	Mediastinum	T-D3300	C0025066
SCT	72484006	Middle lobe of right lung	T-28300	G0225757
SCT	3120008	Pleura	T-29000	C0032225
SCT	113197003	Rib	T-11300	C0035561
SCT	74160004	Skin of chest	T-02424	C0222149
SCT	56873002	Sternum	T-11210	C0038293
SCT	122495006	Thoracic spine	T-11502	C0581269
SCT	816094009	Thorax		
SCT	44567001	Trachea	T-25000	C0040578

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	9875009	Thymus	T-C8000	C0040113
SCT	45653009	Upper lobe of lung	T-28820	G0225756

Include CID ccc1 "Lobe of Lung"

Add new context groups to DICOM PS3.16 as follows:

CID ccc1 Lobe of Lung

Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML
Keyword: LobeOfLung
FHIR Keyword: dicom-cid-ccc1-LobeOfLung
Type: Extensible
Version: 20210328
UID: 1.2.840.10008.6.1.uuu1

Table CID ccc1. Lobe of Lung

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	45653009	Upper lobe of lung	T-28820	C0225756
SCT	72481006	Middle lobe of right lung	T-28300	C4281590
SCT	90572001	Lower lobe of lung	T-28830	C0225758

CID ccc2 Zone of Lung

Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML
Keyword: ZoneOfLung
FHIR Keyword: dicom-cid-ccc2-ZoneOfLung
Type: Extensible
Version: 20210328
UID: 1.2.840.10008.6.1.uuu2

Table CID ccc2. Zone of Lung

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	281392002	Upper zone of lung	T-D3208	C0559286
SCT	281393007	Middle zone of lung	T-D3209	C0559287
SCT	281394001	Lower zone of lung	T-D320A	C0559288

For reference unchanged:

TID 4105 Chest CAD Descriptors

This Template provides qualitative detail for a Single Image Finding or Composite Feature. It is applied to Chest CAD Composite Feature (???) and Chest CAD Single Image Finding (???)

Type: Non-Extensible
Order: Significant
Root: No

Table TID 4105. Chest CAD Descriptors

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
...								
8			CODE	EV (112013, DCM, "Location in Chest")	1	U		DCID 6124 "Location in Chest"
9			CODE	EV (272741003, SCT, "Laterality")	1	U		D???
10			CODE	EV (112006, DCM, "Distribution Descriptor")	1-n	U		DCID 6128 "Chest Distribution Descriptor"
11			CODE	EV (112028, DCM, "Abnormal Distribution of Anatomic Structure")	1	U		D???
12			CODE	EV (112008, DCM, "Site involvement")	1-n	U		DCID 6129 "Chest Site Involvement"
...								

CID 6124 Location in Chest

Version: 20030108

Table CID 6124. Location in Chest

Coding Scheme Designator	Code Value	Code Meaning
<i>Include CID 6125 "General Chest Location"</i>		
<i>Include CID 6126 "Location in Lung"</i>		
<i>Include CID 6127 "Segment Location in Lung"</i>		

CID 6125 General Chest Location

Version: 20030108

Table CID 6125. General Chest Location

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	26216008	Central	G-A110	C0205099
SCT	14414005	Peripheral	G-A111	C0205100
SCT	43674008	Apical	G-A122	C0205111
SCT	57195005	Basal	G-A123	C0205112

CID 6127 Segment Location in Lung

Version: 20030108

Table CID 6127. Segment Location in Lung

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	39743006	Anterior segment of right upper lobe	T-28230	C0225718
SCT	22270008	Anterior segment of left upper lobe	T-28630	C0225742

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	3236000	Posterior segment of right upper lobe	T-28220	C0225717

CID 6128 Chest Distribution Descriptor

Note

Original source of terms is [Fraser and Pare].

Version: 20030108

Table CID 6128. Chest Distribution Descriptor

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
DCM	112154	Bat's wing distribution		
DCM	112155	Butterfly distribution		
DCM	112156	Centrilobular		
DCM	112157	Coalescent		
SCT	19648000	Diffuse	G-A321	C0205219
SCT	255282008	Discoïd	M-020FA	C0439641
SCT	65709003	Disseminated	G-A324	C0205221
SCT	87017008	Focal	G-A351	C0205234
SCT	60132005	Generalized	G-A366	C0205246
DCM	112158	Lobar		
SCT	524008	Multifocal	G-A443	C0205292
SCT	62372003	Segmental	G-A137	C0205122
SCT	31099001	Systemic	G-A572	C0205373

CID 6129 Chest Site Involvement

Note

Original source of terms is [Fraser and Pare].

Version: 20030108

Table CID 6129. Chest Site Involvement

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	39607008	Lung	T-28000	C0024109
SCT	72410000	Mediastinum	T-D3300	C0025066
DCM	112158	Lobar		
SCT	85293002	Interstitial tissue	T-1A007	C0225318
SCT	261061003	Bronchial	R-40939	C0205039
SCT	46750007	Hilum of lung	T-28080	C0225701
SCT	15825003	Aorta	T-42000	C0003483
SCT	3120008	Pleural structure	T-29000	C0032225

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	78904004	Chest wall	T-D3050	C0205076
SCT	80581009	Upper abdomen	T-D4001	C2937240

CID 7151 Segmentation Property Type

Version: 20170914

Table CID 7151. Segmentation Property Type

Coding Scheme Designator	Code Value	Code Meaning
<i>Include ???</i>		
<i>Include CID 7192 "Anatomical Structure Segmentation Property Type"</i>		
<i>Include ???</i>		
<i>Include ???</i>		
<i>Include ???</i>		
<i>Include ???</i>		
<i>Include ???</i>		
<i>Include ???</i>		
<i>Include ???</i>		

CID 7192 Anatomical Structure Segmentation Property Type

Version: 20220402

Table CID 7192. Anatomical Structure Segmentation Property Type

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include CID 7155 "Thoracic Segmentation Type"</i>				

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
<i>Include ???</i>				
SCT	91806002	Body cavity	T-D00A3	C0333343

D DICOM Controlled Terminology Definitions (Normative)

Table D-1. DICOM Controlled Terminology Definitions (Coding Scheme Designator "DCM" Coding Scheme Version "01")

Code Value	Code Meaning	Definition	Notes
112153	<i>Subpleural</i>	<i>Situated or occurring between the pleura and the body wall.</i>	<i>Retired. Replaced by (68599007, SCT, "Subpleural")</i>
112158	Lobar	Of or relating to a lobe (a curved or rounded projection or division). E.g., involving an entire lobe of the lung.	

Add new context groups to DICOM PS3.6 as follows:

A Registry of DICOM Unique Identifiers (UIDs) (Normative)

Table A-3. Context Group UID Values

Context UID	Context Identifier	Context Group Name	Comment
1.2.840.10008.6.1.uuu1	????	????	
1.2.840.10008.6.1.uuu2	????	????	