

DICOM Correction Proposal

STATUS	Assigned
Date of Last Update	2024/10/11
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Correction Number	CP-1570
Log Summary:	Add Dental Acquisition Attributes into VL IOD Acquisition Context Module
Name of Standard:	2023e, PS3.3, PS3.6, PS3.16
The Rationale for Correction:	<p>Dentistry needs to make use of Acquisition Context attributes for clinical and forensic use cases.</p> <p>The Visible Light Photography IOD includes the 'Acquisition Context Module' to describe conditions present during data acquisition. Rather than develop a new module, a new context group provides the required standard attributes. <i>Other attributes may be vendor-specific; therefore, it may not be possible to define the commonly used values. However, being able to convey those in a coded way in the Acquisition Context Sequence appears to be much more favorable and informative to the end-user, compared to the use of private tags.</i></p> <p>A prospective ADA Standard (ADA-1107), with the potential to evolve into an IHE Profile (DENT-OIP), meticulously describes how to use DICOM for orthodontic photographs, and has been used as a source for this Correction Package. Regular nightly builds can be accessed at the following link: https://open-ortho.org/dent-oip/nightly/ .</p> <p>An operational instantiation of this standard is underway, facilitated by the open-ortho project. For more information, visit: https://github.com/open-ortho/dicom4ortho .</p>

1. **Closed Item:** We initially created a new VL photographic parameters module since the C.8.17.3 Ophthalmic Photographic parameters module contains eye care specific attributes. WG-6 recommended that we modify the existing [A.32.4. VL Photographic Image IOD](#) (see section 3.3., A.32.4.), not create a new sequence.
2. **Closed Item:** Another consideration to the general vs. dental-specific solution, WG-6 referred to C.8.12 VL Modules and Functional Group Macros (see section 3.3, C.8.12). WG-6 recommended we reuse existing optical path module attributes (see section 3.3, C.8.12.5). Created CP 1669, Add Optical Path Module to all Visible Light family IODs and remove from this CP.
3. **Closed Item:** We will need to build new code tables (see section 3.16, part C.). Table examples cited include CID 92 Joint Position During Acquisition and a new PS3.16 Annex C Acquisition Context Template to contain Acquisition Perspective, Image Perspective, Functional conditions present during acquisition, Occlusal Relationship as CODE content items with a new CID for the coded values for each of them, just like TID 3401, and reference it as an Attribute Constraint for this application in the VL Photographic IOD section of PS3.3, along with constraints on Anatomic Region Sequence, etc. The new WG 6 direction to us is to create a View Code Sequence instead of an Acquisition Context.
4. **Closed Item:** Our discussion with WG-6 resulted in DICOM needs to make anatomical information encoding in general and visible light images consistent. For visible light imaging, such as the VL Photographic IOD, Anatomic Region Sequence is included via the VL Image Module, but Image Laterality is not, which is inconsistent with the pattern established, for example, by Digital X-Ray IODs. The Image laterality attribute is in widespread use, rather than requiring that it be sent as a modifier of Primary Anatomic Structure Sequence, which is rarely used in practice. CP-1744 will add the necessary attributes as optional in the General Image Module. These image-level attributes cannot be added to the General Series Module.
5. **Closed Item:** In Table CID 92 Joint Position During Acquisition, we have added our new codes.
6. **Closed Item:** These CID 92 qualifier values are either findings or observational entity.
7. **Closed Item:** Devices Present In Orthodontic Images Codes needed. Added CID NNNN and CID PPPP
8. **Closed Item:** Propose changing title from new Acquisition Context Module to Add Dental Acquisition Attributes into VL IOD.
9. **Closed Item:** update the document to describe the IOD changes, in terms of the addition of a new TID for the acquisition context, which would then contain rows with the name-value pairs pointing to the various context groups.
10. **Closed Item:** CID BBBB VL View: we have selected children of the projection code, following the example of CID-4010 DX View, however we are concerned that the Photos are not projections, they are not shadows, as in radiographs. Are there more applicable codes we should use? We have also considered using coronal and frontal, but if we used coronal for frontal, to be consistent we would have to use sagittal instead of lateral projection. But sagittal doesn't specify which side of the patient it is, it describes a cross section, but photographs represent the surface of the skin. We therefore found it to be more appropriate to use the frontal and lateral and 45 degree projection codes instead of sagittal.
11. **Open Item:** Should we add all of the dental related children of 723394009 |Photographic image record (record artifact)| in CID CCCC VL Dental View?
12. **Open Item:** We have not identified an ideal tag for Photographic View Types codes, except maybe the catch-all acquisition context module.

ITEM #1A: MODIFY PS3.3 A.32.4.4.2 ANATOMIC REGION SEQUENCE TO INCLUDE DENTAL APPLICATIONS

ITEM #1B: MODIFY PS3.16 CID 4028 CRANIOFACIAL ANATOMIC REGIONS AND CREATE CID AAAA HEAD AND/OR NECK PRIMARY ANATOMIC STRUCTURE AS FOLLOWS:

A.32.4.4 VL Photographic Image IOD Content Constraints

A.32.4.4.1 MODALITY

The value of Modality (0008,0060) shall be XC.

A.32.4.4.2 ANATOMIC REGION SEQUENCE

For dermatology applications:

- For Anatomic Region Sequence (0008,2218) BCID 4029 “Dermatology Anatomic Sites” may be used.
- For Anatomic Region Modifier Sequence (0008,2220) BCID 245 “Laterality with Median” may be used.

For dental applications:

- **For Anatomic Region Sequence (0008,2218) BCID 4028 “Craniofacial Anatomic Regions” may be used.**
- **For Anatomic Region Modifier Sequence (0008,2220) BCID CID 247. “Laterality Left-Right Only” may be used.**
- **For Primary Anatomic Structure Sequence (0008,2228) BCID AAAA ”Head and/or Neck Primary Anatomic Structure” may be used.**
- **For Primary Anatomic Structure Modifier Sequence (0008,2230) BCID CID 247. “Laterality Left-Right Only” may be used.**

Table CID 4028. Craniofacial Anatomic Regions

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
<u>SCT</u>	<u>123851003</u>	<u>Mouth region structure</u>		<u>C0230028</u>
SCT	774007	Structure of head and/or neck	T-D1000	C0460004

Table CID AAAA. Head and/or Neck Primary Anatomic Structure

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
<u>SCT</u>	<u>89545001</u>	<u>Face structure</u>		<u>C0015450</u>
<u>SCT</u>	<u>74262004</u>	<u>Oral cavity structure</u>		<u>C0226896</u>
<u>SCT</u>	<u>88176008</u>	<u>Lower dental arch structure</u>		<u>C0227027</u>
<u>SCT</u>	<u>39481002</u>	<u>Upper dental arch structure</u>		<u>C0227026</u>
<u>SCT</u>	<u>261063000</u>	<u>Structure of buccal space</u>		<u>C0444575</u>
<u>SCT</u>	<u>7652006</u>	<u>Structure of frenulum labii</u>		<u>C0022861</u>

ITEM #2A: CREATE NEW PS3.3 VL DENTAL POSITIONING MODULE

B.MODIFY PS3.16 TABLE CID 4010. DX VIEW TO INCLUDE THE MISSING SNOMED CT ANATOMIC TERMS AS FOLLOWS:

TABLE "VL PHOTOGRAPHIC POSITIONING MODULE ATTRIBUTES" HAS BEEN COPIED FROM THE DX POSITIONING MODULE. ONLY THE PARTS OF INTEREST TO DENTAL PHOTOGRAPHY HAVE BEEN THEREFORE BOLDED AND UNDERLINED.

ITEM #2B: CREATE CID BBBB VL VIEW

ITEM #2C: CREATE CID CCCC VL DENTAL VIEW

C.8.12.1 VL IMAGE MODULE

Table C.8-77 specifies the Attributes of the VL Image Module, which describe a VL Image produced by Endoscopy (ES), General Microscopy (GM), Automated-Stage Microscopy (SM), External-camera Photography (XC), Dermoscopy (DMS), or other VL imaging Modalities.

Table C.8-77. VL Image Module Attributes

Attribute Name	Tag	Type	Attribute Description
Image Type	(0008,0008)	1	Image identification characteristics. See Section C.8.12.1.1.6 for specialization.
Photometric Interpretation	(0028,0004)	1	Specifies the intended interpretation of the pixel data. See Section C.8.12.1.1.1 for specialization of this Attribute.
Bits Allocated	(0028,0100)	1	Number of bits allocated for each pixel sample. Each sample shall have the same number of bits allocated. See Section C.8.12.1.1.2 for specialization of this Attribute. See PS3.5 for further explanation.

Bits Stored	(0028,0101)	1	Number of bits stored for each pixel sample. Each sample shall have the same number of bits stored. See Section C.8.12.1.1.2 for specialization of this Attribute. See PS3.5 for further explanation.
High Bit	(0028,0102)	1	Most significant bit for pixel sample data. Each sample shall have the same high bit. See Section C.8.12.1.1.2 for specialization of this Attribute. See PS3.5 for further explanation.
Pixel Representation	(0028,0103)	1	Data representation of the pixel samples. Each sample shall have the same pixel representation. See Section C.8.12.1.1.3 for specialization of this Attribute.
Samples per Pixel	(0028,0002)	1	Number of samples (planes) per image. See Section C.8.12.1.1.4 for specialization of this Attribute.
Planar Configuration	(0028,0006)	1C	Indicates whether the pixel data are encoded color-by-plane or color-by-pixel. Required if Samples per Pixel (0028,0002) has a value greater than 1. See Section C.8.12.1.1.5 for specialization of this Attribute.
Content Time	(0008,0033)	1C	The time the image pixel data creation started. Required if the Image is part of a Series in which the images are temporally related. Note This Attribute was formerly known as Image Time.

Lossy Image Compression	(0028,2110)	2	Specifies whether an Image has undergone lossy compression (at a point in its lifetime). Enumerated Values: 00 Image has NOT been subjected to lossy compression. 01 Image has been subjected to lossy compression. Once this value has been set to "01" it shall not be reset. See Section C.7.6.1.1.5
Referenced Image Sequence	(0008,1140)	1C	A Sequence that references other images significantly related to this image. One or more Items are permitted in this Sequence. Required if Image Type (0008,0008) Value 3 is present and has a value of "STEREO L" or "STEREO R". May also be present otherwise. See Section C.8.12.1.1.7 .
>Include Table 10-3 "Image SOP Instance Reference Macro Attributes"			
>Purpose of Reference Code Sequence	(0040,A170)	2	Describes the purpose for which the reference is made. Zero or one Item shall be included in this Sequence.
>>Include Table 8.8-1 "Code Sequence Macro Attributes"		DCID 7201 " Referenced Image Purpose of Reference ".	
Window Center	(0028,1050)	3	Window Center for display. See Section C.11.2.1.2 for further explanation. Meaningful only if Photometric Interpretation (0028,0004) is MONOCHROME2.

Window Width	(0028,1051)	1C	Window Width for display. See Section C.11.2.1.2 for further explanation. Required if Window Center (0028,1050) is present.
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Image Laterality	(0020,0062)	3	<p>Laterality of (possibly paired) body part (as described in Anatomic Region Sequence (0008,2218)) examined.</p> <p>Enumerated Values:</p> <p>R right L left U unpaired B both left and right</p> <p>Shall be consistent with any laterality information contained in Primary Anatomic Structure Modifier Sequence (0008,2230), Anatomic Region Modifier Sequence (0008,2220), and/or Laterality (0020,0060), if present.</p> <p>Note</p> <p>1. Laterality (0020,0060) is a Series level Attribute and must be the same for all Images in the Series, hence it must be absent if Image Laterality (0020,0062) has different values for Images in the same Series.</p> <p>2. There is no value for median, for which Primary Anatomic Structure Modifier Sequence (0008,2230) or Anatomic Region Modifier Sequence (0008,2220) may be used instead.</p>
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<u>View Code Sequence</u>	<u>(0054,0220)</u>	<u>3</u>	<p><u>Sequence that describes the perspective of the anatomic region of interest which appears on the image.</u></p> <p><u>Note</u> <u>It is strongly recommended that this Attribute be present, in order to ensure that images may be positioned correctly relative to one another for display.</u> <u>Only a single Item is permitted in this Sequence.</u></p>
<p>>Include Table 8.8-1 “Code Sequence Macro Attributes” .</p>			<p><u>BCID BBBB VL View.</u> <u>BCID CCCC VL Dental View.</u></p>
<u>>View Modifier Code Sequence</u>	<u>(0054,0222)</u>	<u>3</u>	<p><u>View modifier.</u> <u>One or more Items are permitted in this Sequence.</u></p>
<p>>>Include Table 8.8-1 “Code Sequence Macro Attributes”</p>			<p><u>BCID DDDD VL View Modifier</u> <u>BCID EEEE VL Dental View Modifier.</u></p>
Anatomic Region Sequence	(0008,2218)	1C	<p>Sequence that identifies the anatomic region of interest in this image (i.e., external anatomy, surface anatomy, or general region of the body). Only a single Item shall be included in this Sequence. Required if Number of Frames (0028,0008) is present and Specimen Description Sequence (0040,0560) is absent. May be present otherwise.</p>

<p>>Include Table 8.8-1 “Code Sequence Macro Attributes”</p>			<p><i>DCID 4040 “Endoscopy Anatomic Region” for the Video Endoscopic IOD.</i></p> <p><i>BCID 4029 “Dermatology Anatomic Site” for the VL Photographic Image IOD and Dermoscopic Photography Image IOD for dermatology applications.</i></p> <p><i>BCID 4031 “Common Anatomic Region” for humans and BCID 7483 “Common Anatomic Regions for Animal” for non-human organisms.</i></p> <p><u>BCID 4028 “Craniofacial Anatomic Regions”</u></p>
>Anatomic Region Modifier Sequence	(0008,2220)	3	<p>Sequence of Items that modifies the anatomic region of interest of this image</p> <p>One or more Items are permitted in this Sequence.</p>
<p>>>Include Table 8.8-1 “Code Sequence Macro Attributes”</p>			<p>BCID 2 “Anatomic Modifier”.</p> <p>BCID 245 “Laterality with Median” is defined for the VL Photographic Image IOD and Dermoscopic Photography Image IOD for dermatology applications.</p> <p><u>BCID CID 247. “Laterality Left-Right Only”</u></p>
<p>Include Table 10-8 “Primary Anatomic Structure Macro Attributes”</p>			<p><u>No CID is defined.</u></p> <p><u>BCID AAAA “Head and/or Neck Primary Anatomic Structure” may be used.</u></p> <p>These Type 3 Attributes are not appropriate when Specimen Description Sequence (0040,0560) is present, as it includes the Primary Anatomic Structure Macro for each specimen in the image.</p>

Channel Description Code Sequence	(0022,001A)	3	<p>Describes the light color used for each channel to generate the image.</p> <p>If Photometric Interpretation (0028,0004) has one of the YBR values, the meaning is for pixel data in an equivalent RGB encoding.</p> <p>Note</p> <p>Interpretation and representation of RGB images rely on the assumption that the red channel really contains the red wavelength range of illumination light, the blue channel the blue wavelength range, etc. Some modalities use the RGB Photometric Interpretation as a container representing 3 channels of any illumination wavelength. Shall have the same number of Items as the value of Samples per Pixel (0028,0002). The channels shall be described in the order in which the channels are encoded.</p>
>Include Table 8.8-1 "Code Sequence Macro Attributes"		BCID 4206 "Ophthalmic Channel Description" .	
Pixel Spacing	(0028,0030)	3	<p>Physical distance in the imaging target (patient or specimen) between the center of each pixel, specified as a numeric pair - adjacent row spacing \ adjacent column spacing, in mm. See Section 10.7.1.3.</p>
Imager Pixel Spacing	(0018,1164)	3	<p>Physical distance measured at the front plane of the Image Receptor housing between the center of each pixel. Specified by a numeric pair - row spacing value (delimiter) column spacing value - in mm.</p> <p>In the case of a photographic camera, the front plane is defined to be the focal plane.</p>

Table 10-8. Primary Anatomic Structure Macro Attributes

Attribute Name	Tag	Type	Attribute Description
Primary Anatomic Structure Sequence	(0008,2228)	3	Sequence of Items that identifies the primary anatomic structure(s) of interest in this Instance. One or more Items are permitted in this Sequence.
>Include Table 8.8-1 “Code Sequence Macro Attributes”			CID may be defined in the Macro invocation.
>Primary Anatomic Structure Modifier Sequence	(0008,2230)	3	Sequence of Items that modifies the primary anatomic structure of interest in this Instance. One or more Items are permitted in this Sequence.
>>Include Table 8.8-1 “Code Sequence Macro Attributes”			DCID 2 “Anatomic Modifier”. BCID CID 247. “Laterality Left-Right Only”

Table CID BBBB VL View

<u>Coding Scheme Designator</u>	<u>SNOMED-CT</u>	<u>Code Meaning</u>	<u>SNOMED-RT ID</u>	<u>UMLS Concept Unique ID</u>
<u>SCT</u>	<u>399033003</u>	<u>Frontal projection</u>		<u>C0442223</u>
<u>SCT</u>	<u>399173006</u>	<u>Left lateral projection</u>		<u>C0442198</u>
<u>SCT</u>	<u>260421001</u>	<u>Left lateral oblique</u>		<u>C0442289</u>
<u>SCT</u>	<u>399198007</u>	<u>Right lateral projection</u>		<u>C0442202</u>
<u>SCT</u>	<u>260424009</u>	<u>Right lateral oblique</u>		<u>C0442292</u>
<u>SCT</u>	<u>399182000</u>	<u>Oblique projection</u>		<u>C0442287</u>
<u>SCT</u>	<u>260454004</u>	<u>45 degree projection</u>		<u>C0442224</u>
<u>SCT</u>	<u>260427002</u>	<u>Oblique lateral</u>		<u>C0442295</u>
<u>SCT</u>	<u>399255003</u>	<u>Submentovertical projection</u>		
<u>SCT</u>	<u>260461000</u>	<u>Vertex projection</u>		
<u>SCT</u>	<u>261665006</u>	<u>Unknown</u>		

Table CID CCCC VL Dental View

<u>Coding Scheme Designator</u>	<u>SNOMED-CT</u>	<u>Code Meaning</u>	<u>SNOMED-RT ID</u>	<u>UMLS Concept Unique ID</u>
<u>SCT</u>	<u>260499007</u>	<u>Occlusal projection</u>		<u>C0442276</u>

Table CID DDDD VL View Modifier

<u>Coding Scheme Designator</u>	<u>SNOMED-CT</u>	<u>Code Meaning</u>	<u>SNOMED-RT ID</u>	<u>UMLS Concept Unique ID</u>
<u>SCT</u>	<u>789135000</u>	<u>Mirrored visible image uncorrected</u>		<u>C5230360</u>
<u>SCT</u>	<u>789134001</u>	<u>Mirrored visible image uncorrected flipped horizontally</u>		<u>C5230389</u>
<u>SCT</u>	<u>789132002</u>	<u>Mirrored visible image uncorrected flipped horizontally and vertically</u>		<u>C5230358</u>
<u>SCT</u>	<u>789133007</u>	<u>Mirrored visible image uncorrected flipped vertically</u>		<u>C5230359</u>

Table CID EEEE VL Dental View Modifier

<u>Coding Scheme Designator</u>	<u>SNOMED-CT</u>	<u>Code Meaning</u>	<u>SNOMED-RT ID</u>	<u>UMLS Concept Unique ID</u>
<u>SCT</u>	<u>789131009</u>	<u>Close up photographic view of teeth with no set magnification or distance</u>		<u>C5230357</u>
<u>SCT</u>	<u>787610003</u>	<u>Photographic image corrected intraoral mirrored visible record</u>		<u>C5192865</u>
<u>SCT</u>	<u>789310004</u>	<u>Mirrored photographic image of teeth corrected flipped horizontally</u>		<u>C5230459</u>
<u>SCT</u>	<u>789311000</u>	<u>Mirrored photographic image of teeth corrected flipped vertically</u>		<u>C5230460</u>
<u>SCT</u>	<u>789312007</u>	<u>Mirrored photographic image of teeth corrected flipped vertically and horizontally</u>		<u>C5230461</u>
<u>SCT</u>	<u>787612006</u>	<u>[Photographic image extraoral with 45 degree view (record artifact)]</u>		
<u>SCT</u>	<u>787611004</u>	<u>[Photographic image extraoral with mandible postured forward (record artifact)]</u>		
<u>SCT</u>	<u>789313002</u>	<u>[Photographic image of anterior teeth (record artifact)]</u>		

<u>Coding Scheme Designator</u>	<u>SNOMED-CT</u>	<u>Code Meaning</u>	<u>SNOMED-RT ID</u>	<u>UMLS Concept Unique ID</u>
<u>SCT</u>	<u>789314008</u>	<u> Photographic image of face with lips in relaxed position (record artifact) </u>		
<u>SCT</u>	<u>787607005</u>	<u> Photographic image with lips closed (record artifact) </u>		
<u>SCT</u>	<u>789130005</u>	<u> Photographic image with mouth partially opened position and teeth apart (record artifact) </u>		

ITEM #3: EXTEND TABLE CID 91 FUNCTIONAL CONDITION PRESENT DURING ACQUISITION

Note: Request also from SNOMED CT for their code values.

A.32.4.4 VL Photographic Image IOD Content Constraints

Part 3: A.32.4.4.3 Acquisition Context Sequence

For dental applications:

- **For Acquisition Context Sequence (0040,0555) TID FFFF. VL Orthodontic Acquisition Context may be used.**

Part 16: 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
<u>ZZZZZZ</u>	<u>Orthognathic Functional Conditions</u>	<u>A functional condition present during acquisition, such as position of lips, mandible position, mouth position. These include functional conditions that might influence the clinical treatment of jaws and/or alignment of teeth.</u>	

Part 16: TID FFFF VL Orthodontic Acquisition Context

Type: Extensible

Order: Non-Significant

Root: No

Table TID FFFF. VL Orthodontic Acquisition Context

	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
<u>1</u>	<u>CODE</u>	<u>DT (ZZZZZZ, DCM, "Orthognathic Functional Conditions")</u>	<u>1-n</u>	<u>U</u>		<u>BCID GGGG Orthognathic Functional Conditions</u>
<u>2</u>	<u>CODE</u>	<u>DT (118243007, SCT, "Finding by inspection")</u>	<u>1-n</u>	<u>U</u>		<u>BCID HHHH Finding by Inspection</u>
<u>3</u>	<u>CODE</u>	<u>DT (363787002, SCT, "Observable entity")</u>	<u>1-n</u>	<u>U</u>		<u>BCID KKKK Observable Entities</u>
<u>4</u>	<u>CODE</u>	<u>DT (25272006, SCT, "Dental occlusion, function")</u>	<u>1</u>	<u>U</u>		<u>BCID LLLL Dental Occlusion</u>
<u>5</u>	<u>CODE</u>	<u>EV (128741, DCM, Longitudinal Temporal Event Type)</u>	<u>1</u>	<u>U</u>		<u>BCID 280 Longitudinal Temporal Event</u>
<u>6</u>	<u>NUM</u>	<u>EV (128740, DCM, Longitudinal Temporal Offset from Event)</u>	<u>1</u>	<u>U</u>		<u>UNITS = DT (d, UCUM, "days")</u>

Table CID GGGG. Orthognathic Functional Conditions

<u>Coding Scheme Designator</u>	<u>Code Value</u>	<u>Code Meaning</u>	<u>SNOMED-RT Concept ID</u>	<u>UMLS Concept Unique ID</u>
<u>SCT</u>	<u>1336028006</u>	<u>Upper and lower lips in relaxed position (finding)</u>		
<u>SCT</u>	<u>1332210001</u>	<u>Mouth in partially open position (finding)</u>		
<u>SCT</u>	<u>1336026005</u>	<u>Mandible postured forwards (finding)</u>		
<u>SCT</u>	<u>1336029003</u>	<u>Upper and lower lips in closed position (finding)</u>		
<u>SCT</u>	<u>225583004</u>	<u>Smiles</u>		<u>C0517048</u>
<u>SCT</u>	<u>262016004</u>	<u>Open Mouth</u>		<u>C0240379</u>

Table CID HHHH. Finding by Inspection

<u>Coding Scheme Designator</u>	<u>Code Value</u>	<u>Code Meaning</u>	<u>SNOMED-RT Concept ID</u>	<u>UMLS Concept Unique ID</u>
<u>SCT</u>	<u>276470008</u>	<u>Skin mark</u>		<u>C0455957</u>
<u>SCT</u>	<u>341000119102</u>	<u>Tattoo of skin</u>		<u>C1366940</u>
<u>SCT</u>	<u>4356008</u>	<u>Gingival recession</u>		<u>C0017572</u>
<u>SCT</u>	<u>710793000</u>	<u>Cant of occlusal plane</u>		<u>C4038832</u>
<u>SCT</u>	<u>1264188003</u>	<u>Local exogenous pigmentation of left buccal mucosa</u>		
<u>SCT</u>	<u>1264193000</u>	<u>Local exogenous pigmentation of right buccal mucosa</u>		
<u>SCT</u>	<u>1260043007</u>	<u>Local exogenous pigmentation of mucosa of soft palate</u>		
<u>SCT</u>	<u>1260047008</u>	<u>Local exogenous pigmentation of mucous membrane of lower lip</u>		
<u>SCT</u>	<u>1260049006</u>	<u>Local exogenous pigmentation of mucous membrane of upper lip</u>		

Children of 276470008 |Skin mark| may be used, i.e. 51089004 Birthmark or 247477005 |Flat birthmark|.

Table CID KKKK. Observable Entities

<u>Coding Scheme Designator</u>	<u>Code Value</u>	<u>Code Meaning</u>	<u>SNOMED-RT Concept ID</u>	<u>UMLS Concept Unique ID</u>
<u>SCT</u>	<u>193093009</u>	<u>Bell's palsy</u>		<u>C0376175</u>
<u>SCT</u>	<u>110343009</u>	<u>Tongue thrust</u>		

Other SCT codes that describe or explain an observable artifact may be used.

Table CID LLLL. Dental Occlusion

<u>Coding Scheme Designator</u>	<u>Code Value</u>	<u>Code Meaning</u>	<u>SNOMED-RT Concept ID</u>	<u>UMLS Concept Unique ID</u>
<u>SCT</u>	<u>110320000</u>	<u>Centric occlusion</u>		<u>C1268896</u>
<u>SCT</u>	<u>736783005</u>	<u>Centric relation</u>		<u>C0007702</u>

ITEM #6: EXTEND PS3.16 CID LONGITUDINAL TEMPORAL EVENTS TO ALLOW FOR ORTHODONTIC TREATMENT PROGRESS

Note:

Table CID MMMM. Orthodontic Treatment Progress

<u>Coding Scheme Designator</u>	<u>Code Value</u>	<u>Code Meaning</u>	<u>SNOMED-RT ID</u>	<u>UMLS Concept Unique ID</u>
<u>SCT</u>	<u>184047000</u>	<u>Patient registration (procedure)</u>		
<u>SCT</u>	<u>1332161000</u>	<u>Orthodontic Treatment started (situation)</u>		
<u>SCT</u>	<u>1340210007</u>	<u>Orthodontic Treatment stopped (situation)</u>		

Table CID 280. Longitudinal Temporal Event Type

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
<i>Include CID MMMM "Orthodontic Treatment Progress"</i>				
NCIt	C37948	Enrollment		C1516879
DCM	121079	Baseline		

ITEM #4: MODIFY CID 4051 BY ADDING GENERAL PHOTOGRAPHY DEVICE REFERENCE

Note: Open Item of adding both new and existing SNOMED terms to DICOM, specifics dependent on DICOM/SNOMED-CT actions.

Table CID 4051. General Device

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
Include CID 8 "Angiographic Interventional Device"				
Include CID 3451 "Calibration Object"				
Include CID 4052 "Phantom Device"				
<u>Include CID NNNN "General Photography Device"</u>				
SCT	61968008	Syringe	A-10150	C0039142

Table CID NNNN. General Photography Device

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
Include CID 4202. "Ophthalmic Photography Acquisition Device"				
<u>Include CID PPPP "Dental Photography Device"</u>				

Table CID PPPP. Dental Photography Device

<u>Coding Scheme Designator</u>	<u>Code Value</u>	<u>Code Meaning</u>	<u>SNOMED-RT ID</u>	<u>UMLS Concept Unique ID</u>
<u>SCT</u>	<u>462735007</u>	<u>Periodontal probe (physical object)</u>		<u>C62058</u>
<u>SCT</u>	<u>102304005</u>	<u>Measuring Ruler</u>		
<u>SCT</u>	<u>39802000</u>	<u>Tongue blade, device</u>		
<u>SCT</u>	<u>53535004</u>	<u>Retractor, device</u>		
<u>SCT</u>	<u>1332162007</u>	<u>Intraoral photography mirror</u>		
<u>SCT</u>	<u>1332163002</u>	<u>Dental photography black contraster</u>		
<u>SCT</u>	<u>1332164008</u>	<u>Photographic image fiducial marker</u>		

