

1	Status	Letter Ballot
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7	Submission Date	2019/10/30

8	Correction Number CP-1993	
9	Log Summary: OB-GYN Ultrasound code and template updates	
10	Name of Standard	
11	PS3.16	
12	Rationale for Correction:	
13	Various ultrasound report templates have single enumerated values for document titles, which is problematic when more specific titles are needed when only partial content is used, and when alternative codes in external schemes become available or need to be used (especially when DCM codes are currently used). See also CP 1961 regarding non-OB/GYN template titles.	
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15		
16	The LWH template would benefit from additional parameters to specify units used for distances and volumes (though it is not the intent to constrain them here, since that would risk the installed base), as well as parameters for functional condition and measurement method.	
17		
18		
19	There needs to be a way to record LWH measurement of follicles.	
20	There needs to be a way to identify individual findings measured in the LWH template - this is done using an Identifier concept for consistency with the other OB-GYN templates rather than invoking TID 4108 Tracking Identifier.	
21		
22	The Pelvis and Uterus Section needs an entry for measuring uterine fibroids.	
23	There needs to be a way of signalling a manual or automated measurement.	
24	B-Mode needs to be added to the set of ultrasound modes	
25	<i>[Ed.Note. SNOMED Request ID #747190 contains 95315005, 8359006, 87982008, 268445003; Request ID #747960 contains 399009009.]</i>	
26		
27	Correction Wording:	

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

TID 5000 OB-GYN Ultrasound Procedure Report

This is the Template for the root of the content tree for the OB-GYN ultrasound procedure report.

Type: Extensible
 Order: Significant
 Root: Yes

Table TID 5000. OB-GYN Ultrasound Procedure Report

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			CONTAINER	EV (125000, DCM, "OB-GYN Ultrasound Procedure Report") <u>BCID ccc01 "OB-GYN Ultrasound Report Document Titles"</u>	1	M		Root node

TID 5013 Follicles Section

This Template contains follicle metrics for left or right ovarian follicles.

Table TID 5013. Parameters

Parameter Name	Parameter Usage
\$Laterality	Ovary laterality
\$Number	The number of follicles

Type: Extensible
 Order: Significant
 Root: No

Table TID 5013. Follicles Section

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			CONTAINER	DT (121070, DCM, "Findings")	1	M		
2	>	HAS CONCEPT MOD	CODE	EV (363698007, SCT, "Finding Site")	1	M		DT (24162005, SCT, "Ovarian Follicle")
3	>	HAS CONCEPT MOD	CODE	EV (272741003, SCT, "Laterality")	1	M		\$Laterality
4	>	CONTAINS	NUM	\$Number	1	U		
5	>	CONTAINS	INCLUDE	DTID 5014 "Follicle Measurement Group"	1-n	U		

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
6	≥	CONTAINS	INCLUDE	DTID 5016 "LWH Volume Group"	1-n	U		<u>\$GroupName = EV (24162005, SCT, "Ovarian Follicle")</u> <u>\$Width = EV (103355008, SCT, "Width")</u> <u>\$Length = EV (410668003, SCT, "Length")</u> <u>\$Height = EV (121207, DCM, "Height")</u> <u>\$Volume = EV (121221, DCM, "Volume of ellipsoid")</u> <u>\$Method = DCID ccc02 "Automation of Measurement"</u>

TID 5014 Follicle Measurement Group

This Template contains metrics for one ovarian follicle.

Type: Extensible
Order: Significant
Root: No

Table TID 5014. Follicle Measurement Group

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			CONTAINER	EV (125007, DCM, "Measurement Group")	1	M		
2	>	HAS OBS CONTEXT	TEXT	EV (125010, DCM, "Identifier")	1	U		Unique among all groups of same laterality
3	>	CONTAINS	INCLUDE	D???	1	U		<u>\$Measurement = EV (118565006, SCT, "Volume")</u> <u>\$Units = EV (ml, UCUM, "ml")</u> <u>\$Method = DCID ccc02 "Automation of Measurement"</u>
4	>	CONTAINS	INCLUDE	D???	1-n	U		<u>\$Measurement = EV (11793-7, LN, "Follicle Diameter")</u> <u>\$Units = EV (cm, "UCUM, "cm")</u> <u>\$Method = DCID ccc02 "Automation of Measurement"</u> <u>\$Derivation = D???</u>

TID 5015 Pelvis and Uterus Section

This Template contains general measurements in the pelvis and uterus.

2 **Type:** Extensible
 3 **Order:** Significant
 6 **Root:** No

7 **Table TID 5015. Pelvis and Uterus Section**

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			CONTAINER	DT (125011, DCM, "Pelvis and Uterus")	1	M		
2	>	CONTAINS	INCLUDE	DTID 5016 "LWH Volume Group"	1	U		\$GroupName = EV (35039007, SCT, "Uterus") \$Width = EV (11865-3, LN, "Uterus Width") \$Length = EV (11842-2, LN, "Uterus Length") \$Height = EV (11859-6, LN, "Uterus Height") \$Volume = EV (33192-6, LN, "Uterus Volume")
2b	≥	CONTAINS	INCLUDE	DTID 5016 "LWH Volume Group"	1-n	U		<u>\$GroupName = EV (95315005, SCT, "Uterine fibroid")</u> <u>\$Width = EV (103355008, SCT, "Width")</u> <u>\$Length = EV (410668003, SCT, "Length")</u> <u>\$Height = EV (121207, DCM, "Height")</u> <u>\$Volume = EV (121221, DCM, "Volume of ellipsoid")</u>
3	>	CONTAINS	INCLUDE	D???	1-n	U		\$Measurement = D??? \$TargetSite = D??? \$Derivation = D???

33 **TID 5016 LWH Volume Group**

34 This Template is a container for a group of measurements that assess the size of an anatomical structure using a volume derived
 35 from perpendicular diameters.

36 **Table TID 5016. Parameters**

Parameter Name	Parameter Usage
\$GroupName	The name of the volume group that is an anatomical structure
\$Volume	Concept name of volume measurement
\$Length	Concept name of length measurement
\$Width	Concept name of width measurement
\$Height	Concept name of height measurement
<u>\$DistanceUnits</u>	<u>Units of linear (height, weight, length) distance measurement</u>

Parameter Name	Parameter Usage
<u>\$VolumeUnits</u>	<u>Units of volume measurement</u>
<u>\$FunctionalCondition</u>	<u>Functional condition present during measurement</u>
<u>\$Method</u>	<u>Value for Measurement Method</u>
<u>\$FindingType</u>	<u>Type of the finding</u>

Type: Extensible
Order: Significant
Root: No

Table TID 5016. LWH Volume Group

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			CONTAINER	\$GroupName	1	M		
1b	≥	HAS OBS CONTEXT	TEXT	EV (125010, DCM, "Identifier")	1	U		Unique among all groups of same type of finding, site and laterality. E.g., "1", "2", etc. within all left ovarian follicle size measurements.
1c	≥	HAS CONCEPT MOD	CODE	EV (370129005, SCT, "Measurement Method")	1	U		\$Method
2	>	CONTAINS	INCLUDE	D???	1	MC	At least one of row 2, 3, 4, 5 shall be present	\$Measurement = \$Volume \$TargetSite = \$GroupName \$Units = \$VolumeUnits
3	>	CONTAINS	INCLUDE	D???	1-n	MC	At least one of row 2, 3, 4, 5 shall be present	\$Measurement = \$Length \$TargetSite = \$GroupName \$Units = \$DistanceUnits
4	>	CONTAINS	INCLUDE	D???	1-n	MC	At least one of row 2, 3, 4, 5 shall be present	\$Measurement = \$Width \$TargetSite = \$GroupName \$Units = \$DistanceUnits
5	>	CONTAINS	INCLUDE	D???	1-n	MC	At least one of row 2, 3, 4, 5 shall be present	\$Measurement = \$Height \$TargetSite = \$GroupName \$Units = \$DistanceUnits
6	≥	CONTAINS	CODE	EV (130324, DCM, "Functional condition present during acquisition")	1	U		\$FunctionalCondition
7	≥	CONTAINS	CODE	EV (121071, DCM, "Finding")	1	U		\$FindingType

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

CID 12224 Ultrasound Image Modes

Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML
 Type: Extensible
 Version: ~~20100317~~yyyymmdd
 UID: 1.2.840.10008.6.1.616

Table CID 12224. Ultrasound Image Modes

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	399064001	2D mode	G-03A2	C1302189
SCT	261197005	Doppler Color Flow	R-409E2	C0475380
SCT	399155008	M mode	G-0394	C1302229
SCT	261199008	Doppler Pulsed	R-409E4	C0242846
SCT	261198000	Doppler Continuous Wave	R-409E3	C0444723
SCT	425704008	Power Doppler	P0-02241	C1960437
SCT	426865009	3D mode	P0-02242	C1960438
SCT	439858009	Tissue Doppler Imaging	P5-B0128	C2585212
SCT	399009009	B mode	G-03AC	C1302166

Amend DICOM PS3.16 by adding new context groups as follows:

CID ccc01 OB-GYN Ultrasound Report Document Titles

Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML
 Type: Extensible
 Version: yyyymmdd
 UID: 1.2.840.10008.6.1.uuu01

Table CID ccc01. Vascular Ultrasound Report Document Titles

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
DCM	125000	OB-GYN Ultrasound Procedure Report		
LN	24869-0	US Pelvis		C0882060
SCT	268445003	Obstetric US scan	P5-B005A	C0412555

CID ccc02 Automation of Measurement

Type: Extensible
 Version: yyyymmdd

Table CID ccc02. Automation of Measurement

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	8359006	Automated	G-D231	C0205554
SCT	87982008	Manual	G-D221	C0175674