

1	STATUS	Letter Ballot
2	Date of Last Update	2014/09/08
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7	Submission Date	2014/03/13

8	Correction Number CP-1378	
9	Log Summary: Add Anatomic Codes for Fetal Biometry and Pelvic Ultrasound	
10	Name of Standard	
11	PS3.6, PS3.16 2014b	
12	Rationale for Correction:	
13	Fetal biometry is performed on various long bones and cranial structures and specific measurements are defined using codes for	
14	the numeric content item that are pre-coordinated and anatomically specific (e.g., (11963-6, LN, "Femur Length").	
15	This is specific enough to unambiguously identify the measurement, but does not allow the laterality to be specified (e.g., whether	
16	the left or right femur was specified). The template that is ultimately invoked for these measurements is the generic TID 300, which	
17	allows Laterality to be specified, but only as a child of Finding Site, and no context group of suitable anatomical codes is provided	
18	for use in these circumstances.	
19	Add suitable anatomical codes in new context groups to mirror the existing fetal biometry context groups.	
20	Correction Wording:	

Amend DICOM PS3.16 Content Mapping Resource - Annex A as follows:

## TID 5005 Fetal Biometry Section

The Fetal Biometry Section template is a container for common biometric groups.

**Type:** Extensible  
**Order:** Significant

**Table TID 5005. Fetal Biometry Section**

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			CONTAINER	DT (125002, DCM, "Fetal Biometry")	1	M		
2	>	HAS OBS CONTEXT	INCLUDE	DTID 1008 "Subject Context, Fetus"	1	MC	IF this template is invoked more than once to describe more than one fetus	
3	>	CONTAINS	INCLUDE	DTID 5008 "Fetal Biometry Group"	1-n	M		\$BiometryType = MemberOf {DCID 12005 "Fetal Biometry Measurements"  \$TargetSite = DCID cp251cc1 "Fetal Biometry Anatomic Sites"

### Content Item Descriptions

Row 3	The group of measurements. Only one group per biometry type.
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## TID 5006 Fetal Long Bones Section

The Long Bones template is a container for biometric data of long bones.

**Type:** Extensible  
**Order:** Significant

**Table TID 5006. Fetal Long Bones Section**

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			CONTAINER	DT (125003, DCM, "Fetal Long Bones")	1	M		
2	>	HAS OBS CONTEXT	INCLUDE	>DTID 1008 "Subject Context, Fetus"	1	MC	IF this template is invoked more than once to describe more than one fetus	

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
3	>	CONTAINS	INCLUDE	DTID 5008 "Fetal Biometry Group"	1-n	M		\$BiometryType = MemberOf {DCID 12006 "Fetal Long Bones Biometry Measurements"  \$TargetSite = DCID cp251cc2 "Fetal Long Bone Anatomic Sites"

#### Content Item Descriptions

Row 3	The group of measurements. Only one group per biometry type.
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## TID 5007 Fetal Cranium Section

The Fetal Cranium template is a container for groups of biometric data of the fetal cranium.

**Type:** Extensible  
**Order:** Significant

**Table TID 5007. Fetal Cranium Section**

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			CONTAINER	DT (125004, DCM, "Fetal Cranium")	1	M		
2	>	HAS OBS CONTEXT	INCLUDE	>DTID 1008 "Subject Context, Fetus"	1	MC	IF this template is invoked more than once to describe more than one fetus	
3	>	CONTAINS	INCLUDE	DTID 5008 "Fetal Biometry Group"	1-n	M		\$BiometryType = MemberOf {DCID 12007 "Fetal Cranium"  \$TargetSite = DCID cp251cc3 "Fetal Cranium Bone Anatomic Sites"

#### Content Item Descriptions

Row 3	The group of measurements. Only one group per biometry type.
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## TID 5008 Fetal Biometry Group

The Biometry Group template is container for a biometric value and its associated growth metrics.

**Table TID 5008. Parameters**

Parameter Name	Parameter Usage
\$BiometryType	The concept name of the biometry measurement
\$TargetSite	<b>Value for Anatomic Location of the biometry measurement</b>

Type: Extensible  
Order: Significant

Table TID 5008. Fetal Biometry Group

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			CONTAINER	DT (125005, DCM, "Biometry Group")	1	M		
2	>	CONTAINS	INCLUDE	DTID 300 "Measurement"	1-n	MC	At least one of row 2 and 3 shall be present	\$Measurement = \$BiometryType <b>\$TargetSite = \$TargetSite</b> \$Derivation = DCID 3627 "Measurement Type"
	...	...	...	...	...	...	...	...

Content Item Descriptions

Row 1	Container to segregate biometry data by measurement type
Row 2	The discrete measurements of the biometry type including derived measurements such as mean. One of the measurements may be flagged as selected for derived measurements.  <b><u>The anatomic location may be precoordinated in the measurement type, but may also be explicitly conveyed in the \$TargetSite parameter, which then also allows laterality to be encoded within TID 300 "Measurement".</u></b>
...	...

TID 5012 Ovaries Section

This template contains metrics of ovary size.

Type: Extensible  
Order: Significant

Table TID 5012. Ovaries 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 (G-C0E3, SRT, "Finding Site")	1	M		DT (T-87000, SRT, "Ovary")

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
3	>	CONTAINS	INCLUDE	DTID 5016 "LWH Volume Group"	1	U		\$GroupName = EV (T-87000, SRT, "Ovary")  \$Width = EV (11829-9, LN, "Left Ovary Width")  \$Length = EV (11840-6, LN, "Left Ovary Length")  \$Height = EV (11857-0, LN, "Left Ovary Height")  \$Volume = EV (12164-0, LN, "Left Ovary Volume")
4	>	CONTAINS	INCLUDE	DTID 5016 "LWH Volume Group"	1	U		\$GroupName = EV (T-87000, SRT, "Ovary")  \$Width = EV (11830-7, LN, "Right Ovary Width")  \$Length = EV (11841-4, LN, "Right Ovary Length")  \$Height = EV (11858-8, LN, "Right Ovary Height")  \$Volume = EV (12165-7, LN, "Right Ovary Volume")

### TID 5015 Pelvis and Uterus Section

This template contains general measurements in the pelvis and uterus.

Type: Extensible  
 Order: Significant

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 (T-83000, SRT, "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")

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
3	>	CONTAINS	INCLUDE	DTID 300 "Measurement"	1-n	U		\$Measurement = DCID 12011 "Ultrasound Pelvis and Uterus"  \$TargetSite = DCID cp251cc4 "Pelvis and Uterus Anatomic Sites"  \$Derivation = DCID 3627 "Measurement Type"

**TID 5016 LWH Volume Group**

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

**Table TID 5016. Parameters**

Parameter Name	Parameter Usage
\$GroupName	The name of the volume group <u>that is an anatomical structure</u>
\$Volume	Concept name of volume measurement
\$Length	Concept name of length measurement
\$Width	Concept name of width measurement
\$Height	Concept name of height measurement

Type: Extensible  
Order: Significant

**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		
2	>	CONTAINS	INCLUDE	DTID 300 "Measurement"	1	MC	At least one of row 2, 3, 4, 5 shall be present	\$Measurement = \$Volume  \$TargetSite = \$GroupName
3	>	CONTAINS	INCLUDE	DTID 300 "Measurement"	1-n	MC	At least one of row 2, 3, 4, 5 shall be present	\$Measurement = \$Length  \$TargetSite = \$GroupName  \$Derivation = DCID 3627 "Measurement Type"
4	>	CONTAINS	INCLUDE	DTID 300 "Measurement"	1-n	MC	At least one of row 2, 3, 4, 5 shall be present	\$Measurement = \$Width  \$TargetSite = \$GroupName  \$Derivation = DCID 3627 "Measurement Type"

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
5	>	CONTAINS	INCLUDE	DTID 300 "Measurement"	1-n	MC	At least one of row 2, 3, 4, 5 shall be present	\$Measurement = \$Height <b>\$TargetSite = \$GroupName</b> \$Derivation = DCID 3627 "Measurement Type"

For reference, DICOM PS3.16 Content Mapping Resource - Annex A existing templates unchanged:

## TID 300 Measurement

...

**Table TID 300. Parameters**

Parameter Name	Parameter Usage
\$Measurement	Coded term or Context Group for Concept Name of measurement
\$Units	Units of Measurement
\$ModType	Modifier Name for Concept Name of measurement
\$ModValue	Modifier Value for Concept Name of measurement
\$Method	Value for Measurement Method
\$Derivation	Value for Measurement Derivation
\$TargetSite	Value for Anatomic Location of measurement
\$TargetSiteMod	Modifier Value for Anatomic Location of measurement
\$Equation	Coded term or Context Group for the equation or table from which the measurement was derived or computed
\$ImagePurpose	Purpose of Reference for an image used as a source of the measurement
\$WavePurpose	Purpose of Reference for a waveform used as a source of the measurement
\$RefAuthority	Bibliographic reference or authority for statistical properties of a reference population
\$RangeAuthority	Bibliographic reference or authority for the normal range of the measurement
\$DerivationParameter	Coded term or Context Group for Concept Name of a derivation parameter
\$DerivationParameterUnits	Units of derivation parameter

**Type:** Extensible  
**Order:** Significant

**Table TID 300. Measurement**

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			NUM	\$Measurement	1	M		UNITS = \$Units
2	>	HAS CONCEPT MOD	CODE	\$ModType	1-n	U		\$ModValue
3	>	HAS CONCEPT MOD	CODE	EV (G-C036, SRT, "Measurement Method")	1	U		\$Method
4	>	HAS CONCEPT MOD	CODE	EV (121401, DCM, "Derivation")	1	U		\$Derivation
5	>	HAS CONCEPT MOD	CODE	EV (G-C0E3, SRT, "Finding Site")	1	U		\$TargetSite

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
6	>>	HAS CONCEPT MOD	CODE	EV (G-C171, SRT, "Laterality")	1	U		DCID 244 "Laterality"
7	>>	HAS CONCEPT MOD	CODE	DT (G-A1F8, SRT, "Topographical modifier")	1	U		\$TargetSiteMod
...	...	...	...	...	...	...		...

### Content Item Descriptions

Rows 2, 3, 4, 5	The HAS CONCEPT MOD items allow the explicit definition of terms for post-coordination of the measurement concept name. Additional post-coordinated modifier terms may be included in a SOP Instance based on this template, in accordance with section 6.2.4, or as defined by templates that invoke this template and explicitly define additional post-coordinated modifiers (e.g., TID 5203).
...	...

*Amend DICOM PS3.16 Content Mapping Resource - Annex B as follows to add new context groups:*

## CID cp251cc1 Fetal Biometry Anatomic Sites

**Type:** Extensible  
**Version:** yyyyymmdd

**Table CID cp251cc1. Fetal Biometry Anatomic Sites**

Coding Scheme Designator	Code Value	Code Meaning
SRT	T-D4000	Abdomen
SRT	T-A6000	Cerebellum
SRT	T-A1520	Cisterna Magna
SRT	T-12710	Femur
SRT	T-D9700	Foot
SRT	T-71000	Kidney
SRT	T-11100	Skull
SRT	T-D3000	Thorax
SRT	T-D2000	Trunk

## CID cp251cc2 Fetal Long Bone Anatomic Sites

**Type:** Extensible  
**Version:** yyyyymmdd

**Table CID cp251cc2. Fetal Long Bone Anatomic Sites**

Coding Scheme Designator	Code Value	Code Meaning
SRT	T-12310	Clavicle
SRT	T-12710	Femur
SRT	T-12750	Fibula
SRT	T-12750	Radius
SRT	T-12740	Tibia
SRT	T-12430	Ulna



## CID cp251cc3 Fetal Cranium Bone Anatomic Sites

Type: Extensible  
Version: yyymmdd

**Table CID cp251cc3. Fetal Cranium Anatomic Sites**

Coding Scheme Designator	Code Value	Code Meaning
SRT	T-A1700	Anterior Horn Lateral Ventricle
SRT	T-A6000	Cerebellum
SRT	T-A010F	Cerebral hemisphere
SRT	T-A1520	Cisterna magna
SRT	T-A1650	Lateral Ventricle
SRT	T-D06B6	Nuchal region of scalp
SRT	T-D14AE	Orbit
SRT	T-A1710	Posterior Horn Lateral Ventricle

## CID cp251cc4 Pelvis and Uterus Anatomic Sites

Type: Extensible  
Version: yyymmdd

**Table CID cp251cc4. Pelvis and Uterus Anatomic Sites**

Coding Scheme Designator	Code Value	Code Meaning
SRT	T-83200	Cervix
SRT	T-83400	Endometrium
SRT	T-83000	Uterus

*For reference, DICOM PS3.16 Content Mapping Resource - Annex B existing contexts groups unchanged:*

## CID 12005 Fetal Biometry Measurements

Type: Extensible  
Version: 20030130

**Table CID 12005. Fetal Biometry Measurements**

Coding Scheme Designator	Code Value	Code Meaning
LN	11979-2	Abdominal Circumference
LN	11818-2	Anterior-Posterior Abdominal Diameter
LN	11819-0	Anterior-Posterior Trunk Diameter
LN	11820-8	Biparietal Diameter
LN	11824-0	BPD area corrected
LN	11860-4	Cisterna Magna
LN	11963-6	Femur Length
LN	11965-1	Foot length
LN	11984-2	Head Circumference

Coding Scheme Designator	Code Value	Code Meaning
LN	11851-3	Occipital-Frontal Diameter
LN	11988-3	Thoracic Circumference
LN	33068-8	Thoracic Area
LN	11862-0	Transverse Abdominal Diameter
LN	11863-8	Trans Cerebellar Diameter
LN	11864-6	Transverse Thoracic Diameter
LN	11853-9	Left Kidney thickness
LN	11834-9	Left Kidney length
LN	11825-7	Left Kidney width
LN	11855-4	Right Kidney thickness
LN	11836-4	Right Kidney length
LN	11827-3	Right Kidney width
LN	33191-8	APAD * TAD

## CID 12006 Fetal Long Bones Biometry Measurements

Type: Extensible  
Version: 20030130

Table CID 12006. Fetal Long Bones Measurements

Coding Scheme Designator	Code Value	Code Meaning
LN	11966-9	Humerus length
LN	11967-7	Radius length
LN	11969-3	Ulna length
LN	11968-5	Tibia length
LN	11964-4	Fibula length
LN	11962-8	Clavicle length
LN	11963-6	Femur Length

## CID 12007 Fetal Cranium

Type: Extensible  
Version: 20030130

Table CID 12007. Fetal Cranium

Coding Scheme Designator	Code Value	Code Meaning
LN	12171-5	Lateral Ventricle width
LN	11860-4	Cisterna Magna length
LN	12146-7	Nuchal Fold thickness
LN	33070-4	Inner Orbital Diameter
LN	11629-3	Outer Orbital Diameter
LN	11863-8	Trans Cerebellar Diameter
LN	33069-6	Nuchal Translucency

Coding Scheme Designator	Code Value	Code Meaning
LN	33197-5	Anterior Horn Lateral ventricular width
LN	33196-7	Posterior Horn Lateral ventricular width
LN	12170-7	Width of Hemisphere

## CID 12011 Ultrasound Pelvis and Uterus

Type: Extensible  
Version: 20030130

Table CID 12011. Ultrasound Pelvis and Uterus

Coding Scheme Designator	Code Value	Code Meaning
LN	11961-0	Cervix Length
LN	12145-9	Endometrium Thickness

Amend DICOM PS3.6 Data Dictionary - Annex A - Registry of DICOM Unique Identifiers (UIDs) as follows, to add UIDs for new context groups:

Table A-3. Context Group UID Values

Context UID	Context Identifier	Context Group Name
	<u>cp251cc1</u>	<u>Fetal Biometry Anatomic Sites</u>
	<u>cp251cc2</u>	<u>Fetal Long Bone Anatomic Sites</u>
	<u>cp251cc3</u>	<u>Fetal Cranium Bone Anatomic Sites</u>
	<u>cp251cc4</u>	<u>Pelvis and Uterus Anatomic Sites</u>