DICOM Conformance Statement

Application Annex:

XperGuide R1.3

On Interventional Workspot R1.6

© Koninklijke Philips N.V.

PHILIPS

Issued by:

Philips Medical Systems Nederland BV, a Philips Healthcare company,

P.O. Box 10.000
5680 DA Best
The Netherlands

Internet: www.philips.com/dicom

Document Number: ICAP-PF.0046252
Date: 02-March-2020

© Koninklijke Philips N.V.

Table of Contents

1. INTRODUCTION 4
1.1. REVISION HISTORY 4
1.2. TERMINOLOGY 4
2. DATA SPECIFICATIONS 5
2.1. SUPPORTED IOD'S 5
2.1.1. Acceptance Criteria 5
2.1.2. Contents of Created IOD's 6
2.1.2.1. List of created SOP Classes 6
2.1.2.2. X-Ray Angiographic Image Storage SOP Class 6
2.1.2.3. Raw data Storage SOP class 10
2.1.2.4. Secondary Capture Image Storage SOP class 12
2.1.2.5. Multiframe True Color Secondary Capture Image Storage SOP class 14

© Koninklijke Philips N.V.

1. Introduction

This DICOM Conformance Statement annex is applicable to XperGuide R1.3 on Interventional Workspot R1.6, later referred to as XperGuide Application. In general the XperGuide Application is the user environment for viewing and analyzing XA images.

1.1. Revision History

The revision history below provides dates and differences among individual document versions.

Table 1: Revision History

Document Version	Date of Issue	Status	Description
00	02-March-2020	Approved	Final Version

1.2. Terminology

DICOM	Digital Imaging and Communications in Medicine
IOD	Information Object Definition
UID	Unique Identifier
VR	Value Representation

© Koninklijke Philips N.V.

2. Data Specifications

2.1. Supported IOD's

This section specifies each IOD accepted and / or created by XperGuide Application.

ACCEPTED The applicable IOD is accepted for storage in the repository of the hosting platform and supported for import XperGuide Application for viewing and analysis.
CREATED The XperGuide Application supports generation of derived data by using the applicable IOD and is able to store this data in the repository of the hosting platform.

Table 2: Supported IOD's

IOD		Support	
Name	**UID**	**ACCEPTED**	**CREATED**
Raw Data Storage SOP Class	1.2.840.10008.5.1.4.1.1.66	No	Yes
X-Ray Angiographic Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.12.1	Yes	Yes
Secondary Capture Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.7	No	Yes
Multiframe True Color Secondary Capture Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.7.4	No	Yes

2.1.1. Acceptance Criteria

This section specifies the acceptance criteria applied by XperGuide Application to which a dataset should adhere before it can be imported into the application. This can be criteria on the highest level (e.g. data from a certain manufacturer or system model) or certain DICOM attributes mandatory to be present into the dataset holding a specific value. In case one or more Philips private attributes are required, then a list of supported Philips system models will be mentioned.

Table 3: Accepted system models

Manufacturer	Modality	System Model Name(s)
Not applicable	Not applicable	Not applicable

Table 4: Accepted transfer syntaxes per IOD

IOD		Transfer Syntax	
Name	**UID**	**Name**	**UID**
X-Ray Angiographic Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.12.1	Implicit VR Little Endian	1.2.840.10008.1.2
		Explicit VR Big Endian	1.2.840.10008.1.2.2
		Explicit VR Little Endian	1.2.840.10008.1.2.1
		JPEG 2000 Image Compression	1.2.840.10008.1.2.4.91
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90
		JPEG Baseline (Process 1)	1.2.840.10008.1.2.4.50
		JPEG Extended (Process 2 & 4)	1.2.840.10008.1.2.4.51
		JPEG Lossless, Non-Hierarchical, FOP (Process 14)	1.2.840.10008.1.2.4.70
		RLE Lossless	1.2.840.10008.1.2.5

Table 5: Accepted attribute values

Attribute Name	Attribute Number	Values / Comments

© Koninklijke Philips N.V.

Not applicable	Not applicable	Not applicable

2.1.2. Contents of Created IOD's

This section specifies in detail the attribute contents of created data objects. Attributes are grouped together by its corresponding module as specified by DICOM standard. Philips private attributes are excluded for specification.

Abbreviations used in the Module table for the column "Presence of Value" are:

ALWAYS	The attribute is always present with a value
EMPTY	The attribute is always present without any value (attribute sent zero length)
VNAP	The attribute is always present and its Value is Not Always Present (attribute sent zero length if no value is present)
ANAP	The attribute is present under specified condition – if present then it will always have a value

The abbreviations used in the Module table for the column "Source" are:

AUTO	The attribute value is generated automatically
CONFIG	The attribute value source is a configurable parameter
COPY	The attribute value source is another SOP instance
FIXED	The attribute value is hard-coded in the application
IMPLICIT	The attribute value source is a user-implicit setting
MPPS	The attribute value is the same as that use for Modality Performed Procedure Step
MWL	The attribute value source is a Modality Worklist
USER	The attribute value source is explicit user input

2.1.2.1. List of created SOP Classes

Table 6: List of created SOP Classes

SOP Class Name	SOP Class UID
X-Ray Angiographic Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.12.1
Raw Data Storage SOP Class	1.2.840.10008.5.1.4.1.1.66
Secondary Capture Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.7
Multiframe True Color Secondary Capture Image Storage SOP Class	1.2.840.10008.5.1.4.1.1.7.4

2.1.2.2. X-Ray Angiographic Image Storage SOP Class

Table 7: IOD of Created X-Ray Angiographic Image Storage Instances

Information Entity	Module	Presence Of Module
Patient	Patient Module	ALWAYS
Study	General Study Module	ALWAYS
Series	General Series Module	ALWAYS
Equipment	General Equipment Module	ALWAYS
Image	General Image Module	ALWAYS
	Image Pixel Module	ALWAYS
	Cine Module	ALWAYS
	Multi-Frame Module	ALWAYS
	Display Shutter Module	ALWAYS
	X-Ray Image Module	ALWAYS
	X-Ray Acquisition Module	ALWAYS
	X-Ray Table Module	ALWAYS
	XA Positioner Module	ALWAYS
	DX Detector Module	ALWAYS

© Koninklijke Philips N.V.

	VOI LUT Module	ALWAYS
	SOP Common Module	ALWAYS

Table 8: Patient Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Patient's Name	0010,0010	PN		VNAP	COPY	
Patient ID	0010,0020	LO		VNAP	COPY	
Patient's Birth Date	0010,0030	DA		VNAP	COPY	
Patient's Sex	0010,0040	CS		VNAP	COPY	

Table 9: General Study Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Study Date	0008,0020	DA		VNAP	COPY	
Study Time	0008,0030	TM		VNAP	COPY	
Accession Number	0008,0050	SH		VNAP	COPY	
Referring Physician's Name	0008,0090	PN		VNAP	COPY	
Study Instance UID	0020,000D	UI		ALWAYS	AUTO	
Study ID	0020,0010	SH		VNAP	COPY	

Table 10: General Series Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Series Date	0008,0021	DA		ANAP	COPY	
Series Time	0008,0031	TM		ANAP	COPY	
Modality	0008,0060	CS		ALWAYS	COPY	
Series Description	0008,103E	LO		ANAP	COPY	
Performing Physician's Name	0008,1050	PN		ANAP	COPY	
Related Series Sequence	0008,1250	SQ		ANAP	COPY	
>Study Instance UID	0020,000D	UI		ALWAYS	AUTO	
>Series Instance UID	0020,000E	UI		ALWAYS	AUTO	
>Purpose of Reference Code Sequence	0040,A170	SQ		VNAP	COPY	
Series Instance UID	0020,000E	UI		ALWAYS	AUTO	
Series Number	0020,0011	IS		VNAP	COPY	
Performed Procedure Step Start Date	0040,0244	DA		ANAP	COPY	
Performed Procedure Step Start Time	0040,0245	TM		ANAP	COPY	
Performed Procedure Step ID	0040,0253	SH		ANAP	COPY	

© Koninklijke Philips N.V.

Table 11: General Equipment Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Manufacturer	0008,0070	LO	Philips	VNAP	FIXED	
Institution Name	0008,0080	LO		ANAP	AUTO	
Manufacturer's Model Name	0008,1090	LO	Interventional Workspot	ANAP	CONFIG	
Software Versions	0018,1020	LO	1.6.x	ANAP	CONFIG	where “x” is the detailed application SW version.

Table 12: General Image Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Image Type	0008,0008	CS		ANAP	COPY	
Acquisition Date	0008,0022	DA		ANAP	COPY	
Content Date	0008,0023	DA		VNAP	COPY	
Acquisition Time	0008,0032	TM		ANAP	COPY	
Content Time	0008,0033	TM		VNAP	COPY	
Instance Number	0020,0013	IS		VNAP	COPY	
Patient Orientation	0020,0020	CS		ANAP	COPY	
Lossy Image Compression	0028,2110	CS		ANAP	COPY	
Icon Image Sequence	0088,0200	SQ		ANAP	COPY	
>Samples per Pixel	0028,0002	US		ALWAYS	COPY	
>Photometric Interpretation	0028,0004	CS		ALWAYS	COPY	
>Rows	0028,0010	US		ALWAYS	COPY	
>Columns	0028,0011	US		ALWAYS	COPY	
>Bits Allocated	0028,0100	US		ALWAYS	COPY	
>Bits Stored	0028,0101	US		ALWAYS	COPY	
>High Bit	0028,0102	US		ALWAYS	COPY	
>Pixel Representation	0028,0103	US		ALWAYS	COPY	
>Pixel Data	7FE0,0010	OW/ OB		ANAP	COPY	
>Image Type	0008,0008	CS		ANAP	COPY	
>SOP Class UID	0008,0016	UI		ANAP	COPY	
>SOP Instance UID	0008,0018	UI		ANAP	COPY	
>Instance Number	0020,0013	IS		ANAP	COPY	
>Patient Orientation	0020,0020	CS		ANAP	COPY	

Table 13: Image Pixel Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Samples per Pixel	0028,0002	US		ALWAYS	COPY	
Photometric Interpretation	0028,0004	CS		ALWAYS	COPY	
Rows	0028,0010	US		ALWAYS	COPY	
Columns	0028,0011	US		ALWAYS	COPY	
Bits Allocated	0028,0100	US		ALWAYS	COPY	
Bits Stored	0028,0101	US		ALWAYS	COPY	
High Bit	0028,0102	US		ALWAYS	COPY	

© Koninklijke Philips N.V.

Pixel Representation	0028,0103	US		ALWAYS	COPY	
Pixel Data	7FE0,0010	OB/ OW		VNAP	COPY	

Table 14: Cine Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Cine Rate	0018,0040	IS		ANAP	COPY	
Frame Time	0018,1063	DS		ALWAYS	COPY	

Table 15: Multi-Frame Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Number of Frames	0028,0008	IS		ALWAYS	COPY	
Frame Increment Pointer	0028,0009	AT		ALWAYS	COPY	

Table 16: Display Shutter Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Shutter Shape	0018,1600	CS		ALWAYS	COPY	
Shutter Left Vertical Edge	0018,1602	IS		ALWAYS	COPY	
Shutter Right Vertical Edge	0018,1604	IS		ALWAYS	COPY	
Shutter Upper Horizontal Edge	0018,1606	IS		ALWAYS	COPY	
Shutter Lower Horizontal Edge	0018,1608	IS		ALWAYS	COPY	

Table 17: X-Ray Image Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Image Type	0008,0008	CS		ALWAYS	COPY	
Samples per Pixel	0028,0002	US		ALWAYS	COPY	
Photometric Interpretation	0028,0004	CS		ALWAYS	COPY	
Frame Increment Pointer	0028,0009	AT		ALWAYS	COPY	
Bits Allocated	0028,0100	US		ALWAYS	COPY	
Bits Stored	0028,0101	US		ALWAYS	COPY	
High Bit	0028,0102	US		ALWAYS	COPY	
Pixel Representation	0028,0103	US		ALWAYS	COPY	
Pixel Intensity Relationship	0028,1040	CS		ALWAYS	COPY	
Lossy Image Compression	0028,2110	CS		ALWAYS	COPY	

Table 18: X-Ray Acquisition Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
KVP	0018,0060	DS		VNAP	COPY	
Exposure Time	0018,1150	IS		VNAP	COPY	
Radiation Setting	0018,1155	CS		ALWAYS	COPY	
Imager Pixel Spacing	0018,1164	DS		ANAP	COPY	
Pixel Spacing	0028,0030	DS		ALWAYS	COPY	

© Koninklijke Philips N.V.

Table 19: X-Ray Table Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Table Motion	0018,1134	DS		VNAP	COPY	
Table Angle	0018,1138	DS		ANAP	COPY	

Table 20: XA Positioner Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Distance Source to Patient	0018,1111	DS		ANAP	COPY	
Distance Source to Patient	0018,1111	DS		ANAP	COPY	
Positioner Motion	0018,1500	CS		VNAP	COPY	
Positioner Primary Angle Increment	0018,1520	DS		VNAP	COPY	
Positioner Secondary Angle Increment	0018,1521	DS		VNAP	COPY	

Table 21: DX Detector Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Imager Pixel Spacing	0018,1164	DS		ALWAYS	COPY	
Pixel Spacing	0028,0030	DS		ALWAYS	COPY	

Table 22: VOI LUT Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Window Center	0028,1050	DS		ALWAYS	COPY	
Window Width	0028,1051	DS		ALWAYS	COPY	

Table 23: SOP Common Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Specific Character Set	0008,0005	CS		ALWAYS	AUTO	As per hosting platform
Instance Creation Date	0008,0012	DA		ANAP	COPY	
Instance Creation Time	0008,0013	TM		ANAP	COPY	
SOP Class UID	0008,0016	UI	1.2.840.10008.5.1.4.1.1.12.1	ALWAYS	COPY	
SOP Instance UID	0008,0018	UI		ALWAYS	AUTO	
Instance Number	0020,0013	IS		ANAP	COPY	

2.1.2.3. Raw data Storage SOP class

Table 24: IOD of Created Raw Data Storage SOP Class Instances

Information Entity	Module	Presence Of Module
Patient	Patient Module	ALWAYS
Study	General Study Module	ALWAYS
Series	General Series Module	ALWAYS
Frame of Reference	Frame of Reference	OPTIONAL
Equipment	General Equipment Module	ALWAYS

© Koninklijke Philips N.V.

Image	Acquisition Context Module	ALWAYS
	Raw Data Module	ALWAYS
	SOP Common Module	ALWAYS

Table 25 : Patient Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Patient's Name	0010,0010	PN		ALWAYS	COPY	copied from source data
Patient ID	0010,0020	LO		ALWAYS	COPY	copied from source data
Patient's Birth Date	0010,0030	DA		VNAP	COPY	copied from source data
Patient's Sex	0010,0040	CS		ALWAYS	COPY	copied from source data

Table 26 : General Study Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Study Date	0008,0020	DA		ALWAYS	COPY	copied from source data
Study Time	0008,0030	TM		ALWAYS	COPY	copied from source data
Referring Physician's Name	0008,0090	PN		VNAP	COPY	copied from source data
Study Instance UID	0020,000D	UI		ALWAYS	COPY	copied from source data
Study ID	0020,0010	SH		ALWAYS	COPY	copied from source data
Accession Number	0008,0050	SH		EMPTY	AUTO, USER	

Table 27: General Series Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Series Date	0008,0021	DA		ANAP	COPY	copied from source data
Series Time	0008,0031	TM		ANAP	COPY	copied from source data
Modality	0008,0060	CS		ALWAYS	COPY	copied from source data
Series Description	0008,103E	LO		ANAP	AUTO	
Performing Physicians' name	0008,1050	PN		ANAP	AUTO	
Related Series Sequence	0008,1250	SQ		ANAP	AUTO	
>Study Instance UID	0020,000D	UI		ALWAYS	AUTO	
>Series Instance UID	0020,000E	UI		ALWAYS	COPY	copied from source data
>Purpose of Reference Code Sequence	0040,A170	SQ		VNAP	AUTO	
Series Instance UID	0020,000E	UI		ALWAYS	AUTO	
Series Number	0020,0011	IS		VNAP	COPY	copied from source data
Laterality	0020,0060	CS		ANAP	AUTO	
Performed Procedure Step Start Date	0040,0244	DA		ANAP	AUTO	
Performed Procedure Step Start Time	0040,0245	TM		ANAP	AUTO	
Performed Procedure Step ID	0040,0253	SH		ANAP	AUTO	

Table 28: Frame of Reference Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Frame of Reference UID	0020,0052	UI		ALWAYS	COPY	copied from source data

© Koninklijke Philips N.V.

Position Reference Indicator	0020,1040	LO		VNAP	COPY	copied from source data

Table 29: General Equipment Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Manufacturer	0008,0070	LO	Philips	VNAP	FIXED	
Institution Name	0008,0080	LO		ANAP	USER	
Manufacturer's Model Name	0008,1090	LO	Interventional Workspot	ANAP	FIXED	
Device Serial Number	0018,1000	LO		ANAP	COPY	copied from source data
Software Versions	0018,1020	LO	1.6.x	ANAP	AUTO	Copied from source data where “x” is the detailed application SW version.

Table 30: Acquisition Context Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Acquisition Context Sequence	0040,0555	SQ		VNAP	COPY	copied from source data

Table 31: Raw Data Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Content Date	0008,0023	DA		ALWAYS	COPY	copied from source data
Content Time	0008,0033	TM		ALWAYS	COPY	copied from source data
Creator Version UID	0008,9123	UI		ALWAYS	COPY	copied from source data
Instance Number	0020,0013	IS		ANAP	COPY	copied from source data

Table 32: SOP Common Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
SOP Class UID	0008,0016	UI	1.2.840.10008.5.1.4.1.1.66	ALWAYS	COPY	copied from source data
SOP Instance UID	0008,0018	UI		ALWAYS	COPY	copied from source data
Original Specialized SOP Class UID	0008,001B	UI		VNAP	COPY	copied from source data
Instance Creation Date	0008,0012	DA		VNAP	COPY	copied from source data
Instance Creation Time	0008,0013	TM		VNAP	COPY	copied from source data
Instance Number	0020,0013	IS		VNAP		

2.1.2.4. Secondary Capture Image Storage SOP class

Table 33: IOD of Created Secondary Capture Image Storage SOP Class Instances

Information Entity	Module	Presence Of Module
Patient	Patient Module	ALWAYS
Study	General Study Module	ALWAYS
Series	General Series Module	ALWAYS
Equipment	General Equipment Module	CONDITIONAL
	SC Equipment Module	ALWAYS
Image	General Image Module	ALWAYS
	Image Pixel Module	ALWAYS
	SOP Common Module	ALWAYS

© Koninklijke Philips N.V.

Table 34: Patient Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Patient's Name	0010,0010	PN		ALWAYS	COPY	copied from source data
Patient ID	0010,0020	LO		ALWAYS	COPY	copied from source data
Patient's Birth Date	0010,0030	DA		ALWAYS	COPY	copied from source data
Patient's Sex	0010,0040	CS		ALWAYS	COPY	copied from source data

Table 35: General Study Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Study Date	0008,0020	DA		ALWAYS	COPY	copied from source data
Study Time	0008,0030	TM		ALWAYS	COPY	copied from source data
Accession Number	0008,0050	SH		VNAP	COPY	copied from source data
Referring Physician's Name	0008,0090	PN		VNAP	COPY	copied from source data
Study Instance UID	0020,000D	UI		ALWAYS	COPY	copied from source data
Study ID	0020,0010	SH		ALWAYS	COPY	copied from source data

Table 36: General Series Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Series Date	0008,0021	DA		ALWAYS	COPY	copied from source data
Series Time	0008,0031	TM		ALWAYS	COPY	copied from source data
Modality	0008,0060	CS		ALWAYS	COPY	copied from source data
Series Instance UID	0020,000E	UI		ALWAYS	COPY	copied from source data
Series Number	0020,0011	IS		VNAP	COPY	copied from source data
Related Series Sequence	0008,1250	SQ		VNAP	AUTO	
>Study Instance UID	0020,000D	UI		ALWAYS	AUTO	
>Series Instance UID	0020,000E	UI		ALWAYS	AUTO	
>Purpose of Reference Code Sequence	0040,A170	SQ		EMPTY	AUTO	

Table 37: General Equipment Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Manufacturer	0008,0070		Philips	VNAP	FIXED	
Station Name	0008,1010	SH		ANAP	AUTO	
Manufacturer’s Model Name	0008,1090	LO	Interventional Workspot	ALWAYS	FIXED	
Software Versions	0018,1020	LO	1.6.x	ALWAYS	FIXED	where “x” is the detailed application SW version.

© Koninklijke Philips N.V.

Table 38 : SC Equipment Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Modality	0008,0060	CS		ANAP	COPY	
Conversion Type	0008,0064	CS	WSD	ALWAYS	COPY	

Table 39: General Image Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Instance Number	0020,0013	IS		ALWAYS	AUTO	
Patient Orientation	0020,0020	CS		VNAP	AUTO	

Table 40: Image Pixel Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Samples per Pixel	0028,0002	US		ALWAYS	FIXED	
Photometric Interpretation	0028,0004	CS		ALWAYS	FIXED	
Planar Configuration	0028,0006	US		ALWAYS	FIXED	
Rows	0028,0010	US		ALWAYS	COPY	copied from source data
Columns	0028,0011	US		ALWAYS	COPY	copied from source data
Bits Allocated	0028,0100	US	8	ALWAYS	FIXED	
Bits Stored	0028,0101	US	8	ALWAYS	FIXED	
High Bit	0028,0102	US	7	ALWAYS	FIXED	
Pixel Representation	0028,0103	US	0000	ALWAYS	COPY	copied from source data
Pixel Data	7FE0,0010	OW/OB		ALWAYS	COPY	copied from source data

Table 41: SOP Common Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Specific Character Set	0008,0005	CS		ALWAYS	AUTO	As per hosting platform
SOP Class UID	0008,0016	UI	1.2.840.10008.5.1.4.1.1.7	ALWAYS	FIXED	
SOP Instance UID	0008,0018	UI		ALWAYS	COPY	copied from source data
Instance Creation Date	0008,0012	DA		ANAP	COPY	copied from source data
Instance Creation Time	0008,0013	TM		ANAP	COPY	copied from source data
Instance Number	0020,0013	IS		ANAP	COPY	copied from source data

2.1.2.5. Multiframe True Color Secondary Capture Image Storage SOP class

Table 42: IOD of Created Multiframe True Color Secondary Capture Image Storage SOP Class Instances

Information Entity	Module	Presence Of Module
Patient	Patient Module	ALWAYS
Study	General Study Module	ALWAYS

© Koninklijke Philips N.V.

Series	General Series Module	ALWAYS
Equipment	General Equipment Module	CONDITIONAL
	SC Equipment Module	ALWAYS
Image	General Image Module	ALWAYS
	Image Pixel Module	ALWAYS
	Cine Module	CONDITIONAL
	Multi-Frame Module	ALWAYS
	Multi-Frame Functional Groups Module	OPTIONAL
	SC Multi-frame Image Module	ALWAYS
	SOP Common Module	ALWAYS

Table 43: Patient Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Patient's Name	0010,0010	PN		VNAP	COPY	copied from source data
Patient ID	0010,0020	LO		VNAP	COPY	copied from source data
Patient's Birth Date	0010,0030	DA		VNAP	COPY	copied from source data
Patient's Sex	0010,0040	CS		VNAP	COPY	copied from source data

Table 44: General Study Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Study Date	0008,0020	DA		VNAP	COPY	copied from source data
Study Time	0008,0030	TM		VNAP	COPY	copied from source data
Accession Number	0008,0050	SH		VNAP	COPY	copied from source data
Referring Physician's Name	0008,0090	PN		VNAP	COPY	copied from source data
Study Instance UID	0020,000D	UI		ALWAYS	COPY	copied from source data
Study ID	0020,0010	SH		VNAP	COPY	copied from source data

Table 45: General Series Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Series Date	0008,0021	DA		ANAP	COPY	copied from source data
Series Time	0008,0031	TM		ANAP	COPY	copied from source data
Modality	0008,0060	CS		ALWAYS	COPY	copied from source data
Series Instance UID	0020,000E	UI		ALWAYS	COPY	copied from source data
Series Number	0020,0011	IS		ANAP	COPY	copied from source data
Related Series Sequence	0008,1250	SQ		ANAP	AUTO	

© Koninklijke Philips N.V.

>Study Instance UID	0020,000D	UI		ALWAYS	AUTO	
>Series Instance UID	0020,000E	UI		ALWAYS	AUTO	
>Purpose of Reference Code Sequence	0040,A170	SQ		VNAP	AUTO	

Table 46: General Equipment Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Manufacturer	0008,0070	LO	Philips	VNAP	COPY	copied from source data
Station Name	0008,1010	SH		ANAP	AUTO	
Manufacturer's Model Name	0008,1090	LO	Interventional Workspot	ANAP	FIXED	
Software Versions	0018,1020	LO	1.6.x	ANAP	FIXED	where “x” is the detailed application SW version.

Table 47 : SC Equipment Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Modality	0008,0060	CS		ANAP	AUTO	
Conversion Type	0008,0064	CS	WSD	ALWAYS	AUTO	

Table 48: General Image Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Instance Number	0020,0013	IS		VNAP		
Patient Orientation	0020,0020	CS		VNAP		
Burned in Annotation	0028,0301	CS		ANAP		

Table 49: Image Pixel Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Samples per Pixel	0028,0002	US		ALWAYS	FIXED	
Photometric Interpretation	0028,0004	CS		ALWAYS	FIXED	
Planar Configuration	0028,0006	US		ALWAYS	FIXED	
Rows	0028,0010	US		ALWAYS	COPY	copied from source data
Columns	0028,0011	US		ALWAYS	COPY	copied from source data
Bits Allocated	0028,0100	US	8	ALWAYS	FIXED	
Bits Stored	0028,0101	US	8	ALWAYS	FIXED	
High Bit	0028,0102	US	7	ALWAYS	FIXED	
Pixel Representation	0028,0103	US	0000	ALWAYS	COPY	copied from source data
Pixel Data	7FE0,0010	OW/OB		ALWAYS	COPY	copied from source data

Table 50: Cine Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Frame Time	0018,1063	DS		ALWAYS	COPY	copied from source data

© Koninklijke Philips N.V.

Table 51: Multi-Frame Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Number of Frames	0028,0008	DS		ALWAYS	COPY	copied from source data
Frame Increment Pointer	0028,0009	AT		ALWAYS	COPY	copied from source data

Table 52: Multi-Frame Functional Groups Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Instance Number	0020,0013	IS		ALWAYS	COPY	copied from source data
Number of Frames	0028,0008	IS		ALWAYS	COPY	copied from source data

Table 53: SC Multi-Frame Image Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
Frame Increment Pointer	0028,0009	AT		ALWAYS	COPY	copied from source data
Burned In Annotation	0028,0301	CS		ALWAYS	COPY	copied from source data

Table 54: SOP Common Module

Attribute Name	Tag	VR	Value	Presence of Value	Source	Comment
SOP Class UID	0008,0016	UI	1.2.840.10008.5.1.4.1.1.7.4	ALWAYS	FIXED	
SOP Instance UID	0008,0018	UI		ALWAYS	COPY	copied from source data
Instance Creation Date	0008,0012	DA		ANAP	COPY	copied from source data
Instance Creation Time	0008,0013	TM		ANAP	COPY	copied from source data
Instance Number	0020,0013	IS		ANAP	COPY	copied from source data

© Koninklijke Philips N.V.