DICOM Conformance Statement

AI-Rad Companion Prostate MR VA32x

December 2025

SIEMENS Healthineers

DICOM Conformance Statement Overview

AI-Rad Companion Prostate MR is a cloud-based/on-premises(edge) application, which communicates indirectly with other DICOM nodes since it makes use of the network services provided by teamplay DICOM Hub and teamplay Receiver.

AI-Rad Companion Prostate MR:

- Receives the input DICOM data from teamplay DICOM Hub after a storage request to teamplay Receiver using the configurable AET (E.g., "AIRC").
- Displays images to a user (browser-based viewer application).
- Generate result objects DICOM RT Structure Set (RTSS) format, Secondary Capture report and MR Images (MR Burnt-in contours).
- Stores result DICOM data via teamplay DICOM Hub and teamplay Receiver to one or several target DICOM nodes configured in teamplay DICOM Hub.

AI-Rad Companion Prostate MR conforms to the DICOM Standard [2] and supports the network services through teamplay DICOM Hub and teamplay Receiver as described in Table 1 - Network Services.

Please refer to the DICOM Conformance Statements of teamplay DICOM Hub and teamplay Receiver [1] for further information on the provided network services.

NOTE: - This DICOM Conformance Statement is applicable for **AI-Rad Companion Prostate MR** of version VA32x and later until superseded by a more recent document applicable to a more recent version.

Table 1: Storage SOP Classes

SOP Classes	SOP Class UID	User of Service (SCU)		Provider of Service (SCP)	
SOP Classes created by AI-Rad Companion Prostate MR					
		Create	**Send**	**Store**	**Display**
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	Yes	No[1]	No[1]	Yes
RT Structure Set Storage	1.2.840.10008.5.1.4.1.1.481.3	Yes	No[1]	No[1]	No
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	Yes	No[1]	No[1]	No

[1] Network communication is performed by teamplay DICOM hub and teamplay receiver. Please refer to the DICOM Conformance Statements of teamplay DICOM Hub for further information.

Table 2: Media Services

Media Storage Application Profile	Write Files (FSC or FSU)	Read Files (FSR)
NOT APPLICABLE		

Table 3: Implementation Identifying Information

Name	Value
Implementation Class UID	1.3.12.2.1107.5.8.21
Implementation Version Name	AI-Rad Companion

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1 Introduction

1.1 Revision History

Version	Date	Change
R1.0	28/11/2025	First version for VA32x Updated the Legal Manufacturer Address Updated to the latest QMS template

1.2 Audience

This document is intended for the audience listed below. It is assumed that the reader has a working knowledge of the DICOM Standard. The document structure was designed for easier access to relevant information for different user groups:
List of audience shall be hospital staff, health system integrators, software designers or implementers.

1.3 Remarks

The scope of this DICOM Conformance Statement is to facilitate integration between **AI-Rad Companion Prostate MR** and other DICOM products. The Conformance Statement should be read and understood in conjunction with the DICOM Standard[1.5]. DICOM by itself does not guarantee interoperability.
The Conformance Statement does, however, facilitate a first-level comparison for interoperability between different applications supporting compatible DICOM functionality.
This Conformance Statement is not supposed to replace validation with other DICOM equipment to ensure proper exchange of intended information. In fact, the user should be aware of the following important issues:

- The comparison of conformance statements is the first step towards assessing interconnectivity and interoperability between **AI-Rad Companion Prostate MR** and other DICOM conformant equipment.
- Test procedures should be defined and executed to validate the required level of interoperability with specific compatible DICOM equipment, as established by the healthcare facility.
- Siemens Healthineers reserves the right to modify the design and specifications contained herein without prior notice. Please contact your local Siemens Healthineers representative for the most recent product information.

1.4 Definitions, Terms and Abbreviations

Definitions, terms, and abbreviations used in this document are defined within the different parts of the DICOM standard.

Additional Abbreviations and terms are as follows:

AE	DICOM Application Entity
AET	Application Entity Title
ASCII	American Standard Code for Information Interchange
DCS	DICOM Conformance Statement
DICOM	Digital Imaging and Communications in Medicine
FSC	File Set Creator
FSR	File Set Reader
FSU	File Set Updater
IOD	DICOM Information Object Definition
ISO	International Standard Organization
MR	Magnetic Resonance Image
NOT APPLICABLE	Not Applicable
NEMA	National Electrical Manufacturers Association
O	Optional Key Attribute
PDU	DICOM Protocol Data Unit
PR	Presentation State
R	Required Key Attribute
ROI	Region Of Interest
RT	Radiation Therapy
SCU	DICOM Service Class User (DICOM client)
SCP	DICOM Service Class Provider (DICOM Server)
SOP	DICOM Service-Object Pair
TID	Template ID
U	Unique Key Attribute
UID	Unique Identifier
UTF-8	Unicode Transformation Format-8
VR	Value Representation
RTSS	Radiotherapy Structure Set

1.5 References

[1] DICOM Conformance Statements of teamplay DICOM Hub – https://www.siemens-healthineers.com/en-in/services/it-standards/dicom-conformance-statements-digital-and-automation/teamplay

[2] NEMA PS3 / ISO 12052, Digital Imaging and Communications in Medicine (DICOM) Standard, National Electrical Manufacturers Association, Rosslyn, VA, USA (available free at https://www.dicomstandard.org/)

[3] AI-Rad Companion Data Privacy and Security White Paper – Based on on-demand request from the end users.

2 Networking

Please refer to the latest version of DICOM Conformance Statements of teamplay DICOM Hub and teamplay Receiver [1] for further information on the provided networking capabilities for AI-Rad Companion Prostate MR.

AI-Rad Companion Prostate MR only supports subset of transfer syntaxes supported by teamplay and the following table lists the supported transfer syntaxes.

Table 4: Supported Transfer Syntaxes

Abstract Syntax		Transfer Syntax	
SOP Classes	**SOP Class UID**	**Name List**	**UID List**
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	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 Lossless, Non-Hierarchical, First-Order Prediction (Process 14 [Selection Value 1]): Default Transfer Syntax for Lossless JPEG Image Compression	1.2.840.10008.1.2.4.70
		JPEG 2000 Image Compression (Lossless Only)	1.2.840.10008.1.2.4.90
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	Implicit VR Little Endian	1.2.840.10008.1.2
RT Structure Set Storage	1.2.840.10008.5.1.4.1.1.481.3	Implicit VR Little Endian	1.2.840.10008.1.2

3 Media Interchange

Please refer to the latest version of DICOM Conformance Statements of teamplay DICOM Hub [1] for further information on the provided Media Interchange for AI-Rad Companion Prostate MR.

4 Transformations of DICOM to CDA

NOT APPLICABLE

5 Support of Extended Character Sets

AI-Rad Companion Prostate MR supports the following character sets as defined in the tables in this section.

Table 5: Single-Byte Character Sets without Code Extension

Character Set Description	Defined Term	ISO Registration Number	Character Set
Default repertoire	None	ISO_IR 6	ISO 646
Latin alphabet No. 1	ISO_IR 100	ISO_IR 100	Supplementary set
		ISO_IR 6	ISO 646
Latin alphabet No. 2	ISO_IR 101	ISO_IR 101	Supplementary set
		ISO_IR 6	ISO 646
Latin alphabet No. 3	ISO_IR 109	ISO_IR 109	Supplementary set
		ISO_IR 6	ISO 646
Latin alphabet No. 4	ISO_IR 110	ISO_IR 110	Supplementary set
		ISO_IR 6	ISO 646
Latin alphabet No. 5	ISO_IR 148	ISO_IR 148	Supplementary set
		ISO_IR 6	ISO 646
Cyrillic	ISO_IR 144	ISO_IR 6	Supplementary set
		ISO_IR 6	ISO 646
Arabic	ISO_IR 127	ISO_IR 127	Supplementary set
		ISO_IR 6	ISO 646
Greek	ISO_IR 126	ISO_IR 126	Supplementary set
		ISO_IR 6	ISO 646
Hebrew	ISO_IR 138	ISO_IR 138	Supplementary set
		ISO_IR 6	ISO 646
Japanese	ISO_IR 13	ISO_IR 13	JIS X 0201: Katakana
		ISO_IR 14	JIS X 0201: Romaji
Thai	ISO_IR 166	ISO_IR 166	TIS 620-253 (1990)
		ISO_IR 6	ISO 646

Table 6: Single-Byte Characters Sets with Code Extension

Character Set Description	Defined Term	Standard for Code Extension	ESC sequence	ISO Registration Number	Character Set
Default repertoire	ISO 2022 IR 6	ISO 2022	ESC 02/08 04/02	ISO-IR 6	ISO 646
Latin alphabet No.1	ISO 2022 IR 100	ISO 2022	ESC 02/13 04/01	ISO-IR 100	Supplementary set
		ISO 2022	ESC 02/08 04/02	ISO-IR 6	ISO 646
Latin alphabet No.2	ISO 2022 IR 101	ISO 2022	ESC 02/13 04/02	ISO-IR 101	Supplementary set
		ISO 2022	ESC 02/08 04/02	ISO-IR 6	ISO 646
Latin alphabet No.3	ISO 2022 IR 109	ISO 2022	ESC 02/13 04/03	ISO-IR 109	Supplementary set
		ISO 2022	ESC 02/08 04/02	ISO-IR 6	ISO 646
Latin alphabet No. 4	ISO 2022 IR 110	ISO 2022	ESC 02/13 04/04	ISO-IR 110	Supplementary set
		ISO 2022	ESC 02/08 04/02	ISO-IR 6	ISO 646
Latin alphabet No. 5	ISO 2022 IR 148	ISO 2022	ESC 02/13 04/13	ISO-IR 148	Supplementary set
		ISO 2022	ESC 02/08 04/02	ISO-IR 6	ISO 646

Table 7: Multi-Byte Character Sets without Code Extension

Character Set Description	Defined Term	ISO Registration Number	Character Set
Unicode	ISO_IR 192	ISO 10646	Unicode in UTF-8
Chinese	GB18030	GB18030	GB 18030-2000 (China Association for Standardization)

Table 8: Multi-Byte Character Sets with Code Extension

Character Set Description	Defined Term	Standard for Code Extension	ESC sequence	ISO Registration Number	Character Set
Japanese	ISO 2022 IR 159	ISO 2022	ESC 02/04 02/08 04/04	ISO-IR 159	JIS X 0212: Supplementary Kanji set
Korean	ISO 2022 IR 149	ISO 2022	ESC 02/04 02/09 04/03	ISO-IR 149	KS X 1001: Hangul and Hanja

All SCS (Special Character Sets) listed above are supported for incoming Data.

Three categories of character sets have to be differentiated because of their different encoding formats:

- Conventional ISO character sets: ISO_IR 6, ISO 2022 IR 6, ISO_IR 100, etc. → Encoded in ISO 2022
- ISO_IR 192 → Encoded in UTF-8
- GB18030 → Encoded in GB18030

It is not possible to recognize the following mismatches automatically on receiving or importing:

- An attribute value is encoded in ISO_IR 192 ← → (0008,0005) contains a conventional ISO character set as primary character set
- An attribute value is encoded in GB18030 ← → (0008,0005) contains a conventional ISO character set as primary character set
- An attribute value is encoded in ISO 2022 ← → (0008,0005) contains ISO_IR 192
- An attribute value is encoded in ISO 2022 ← → (0008,0005) contains GB18030

An IOD that contains one of the above mentioned inconsistencies does not conform to DICOM. As these kinds of inconsistencies cannot be recognized by the system, the IOD will not be rejected but the character data might be corrupted.

AI-Rad Companion Prostate MR supports Kanji characters in the byte zone after 74 (79, 7A, 7B and 7C).

6 Attribute confidentiality profiles

6.1 De-identification

Please refer to the AI-Rad Companion Data Privacy and Security White Paper [3] for further information on the support of de-identification of attributes natively for AI-Rad Companion Cloud deployment. In case of edge (on-premises) deployment, no de-identification happens from teamplay.

7 Security

7.1 Security Profiles

AI-Rad Companion Prostate MR does not support any specific security measures.

7.2 Association Level Security

NOT APPLICABLE

7.3 Application Level Security

NOT APPLICABLE

8 Annexes

The tables in these section uses a number of abbreviations.

The abbreviations used in the “Presence” column are:

VNAP	Value is Not Always Present. Attribute is sent zero length if no value is present.
ANAP	Attribute Not Always Present.
ALWAYS	Attribute and Value are always present.
EMPTY	Attribute is sent zero length.

The abbreviations used in the “Source” Column are:

MWL	The attribute value is copied from Modality Worklist.
USER	The attribute value is entered by the user.
AUTO	The attribute value is generated by the system.
CONFIG	The attribute value is obtained by configuration
COPY	The attribute value is copied from the source image

8.1 IOD Contents

8.1.1 Created SOP Instances

8.1.1.1 RT Structure Set Storage

Table 9: RT Structure Set IOD Modules

Information Entity	Module	Reference	Presence of Module
Patient	Patient	Table 10	ALWAYS
Study	General Study	Table 11	ALWAYS
	Patient Study	Table 12	ALWAYS
Series	RT Series	Table 13	ALWAYS
Equipment	General Equipment	Table 15	ALWAYS
Structure Set	Structure Set	Table 16	ALWAYS
	ROI Contour	Table 17	ALWAYS
	RT ROI Observations	Table 18	ALWAYS
	Approval	Table 19	ALWAYS
	SOP Common	Table 20	ALWAYS

Table 10 lists all Attributes that are supported in the Patient Module.

Table 10: Patient Module

Attribute	Tag	Source	Value	Presence	Comments
Patient`s Name	(0010,0010)	COPY	Copied from source image	ALWAYS	
Patient ID	(0010,0020)	COPY	Copied from source image	ALWAYS	
Patient`s Birth Date	(0010,0030)	COPY	Copied from source image	VNAP	
Patient`s Sex	(0010,0040)	COPY	Copied from source image	VNAP	
Issuer of Patient ID	(0010, 0021)	COPY	Copied from source image	VNAP	

Table 11 lists all Attributes that are supported in the General Study Module

Table 11: General Study Module

Attribute	Tag	Source	Value	Presence	Comments
Study Date	(0008,0020)	COPY	Copied from source image	ALWAYS	
Study Time	(0008,0030)	COPY	Copied from source image	VNAP	
Accession Number	(0008,0050)	COPY	Copied from source image	VNAP	
Referring Physician's Name	(0008,0090)	COPY	Copied from source image	VNAP	
Study Description	(0008,1030)	COPY	Copied from source image	ANAP	
Study Instance UID	(0020,000D)	COPY	Copied from source image	ALWAYS	
Study ID	(0020,0010)	COPY	Copied from source image	ALWAYS	

Table 12 lists all Attributes that are supported in the Patient Study Module

Table 12: Patient Study Module

Attribute	Tag	Source	Value	Presence	Comments
Patient`s Age	(0010,1010)	COPY	Copied from source image	VNAP	
Patient`s Size	(0010,1020)	COPY	Copied from source image	ANAP	
Patient`s Weight	(0010,1030)	COPY	Copied from source image	VNAP	

Table 13 lists all Attributes that are supported in the RT Series Module

Table 13: RT Series Module

Attribute	Tag	Source	Value	Presence	Comments
Series Date	(0008,0021)	AUTO	Date when series is created	ALWAYS	
Series Time	(0008,0031)	AUTO	Time when series is created	ALWAYS	
Modality	(0008,0060)	AUTO	RTSTRUCT	ALWAYS	
Series Description	(0008,103E)	AUTO	RTSS_PROSTATE_<Input Series Description>_<Series Date>_<Series Time>	ALWAYS	
Operators Name	(0008,1070)	AUTO		EMPTY	
Series Instance UID	(0020,000E)	AUTO	Unique identifier of the series.	ALWAYS	
Series Number	(0020,0011)	AUTO	Unique identifier of the series.	ALWAYS	

Table 15 lists all Attributes that are supported in the General Equipment Module

Table 14: General Equipment Module

Attribute	Tag	Source	Value	Presence	Comments
Manufacturer	(0008,0070)	AUTO	Siemens Healthineers	ALWAYS	
Station Name	(0008,1010)	COPY	Copied from input image	ALWAYS	
Manufacturer's Model Name	(0008,1090)	AUTO	AI-Rad Companion Prostate MR	ALWAYS	
Device Serial Number	(0018,1000)	AUTO	Concatenated string composed of the AI-Rad Companion system IVK number and teamplay serial number. For example, 11294418-670307	ALWAYS	
Software Versions	(0018,1020)	AUTO	VXXXX where XXXX indicates the used version of Prostate MR. For Example: - VA32A.	ALWAYS	

Table 16 lists all Attributes that are supported in the Structure Set Module

Table 15: Structure Set Module

Attribute	Tag	Source	Value	Presence	Comments
Structure Set Label	(3006,0002)	AUTO	RTSS_PROSTATE	ALWAYS	
Structure Set Name	(3006,0004)	AUTO	RTSS_PROSTATE	ALWAYS	
Structure Set Date	(3006,0008)	AUTO	Creation date of Structure Set	ALWAYS	
Structure Set Time	(3006,0009)	AUTO	Creation time of Structure Set	ALWAYS	

Attribute	Tag	Source	Value	Presence	Comments
Referenced Frame of Reference Sequence	(3006,0010)	AUTO		ALWAYS	
>Frame of Reference UID	(0020,0052)	COPY	Copied from source image	ALWAYS	
>RT Referenced Study Sequence	(3006,0012)	AUTO		ALWAYS	
>>Referenced SOP Class UID	(0008,1150)	AUTO	SOP class UID of the source image	ALWAYS	
>>Referenced SOP Instance UID	(0008,1155)	AUTO	SOP Instance UID of the source image	ALWAYS	
>>RT Referenced Series Sequence	(3006,0014)	AUTO		ALWAYS	
>>>Series Instance UID	(0020,000E)	AUTO	Series instance UID of the source image	ALWAYS	
>>>Contour Image Sequence	(3006,0016)	AUTO		ALWAYS	
>>>>Referenced SOP Class UID	(0008,1150)	AUTO	SOP class UID of all the images of the source series	ALWAYS	
>>>>Referenced SOP Instance UID	(0008,1155)	AUTO	SOP Instance UID of all the images of the source series	ALWAYS	
Structure Set ROI Sequence	(3006,0020)	AUTO		ALWAYS	
>ROI Number	(3006,0022)	AUTO	Identification number of the ROI starting from 1.	ALWAYS	
>Referenced Frame of Reference UID	(3006,0024)	COPY	Copied from source image	ALWAYS	
>ROI Name	(3006,0026)	AUTO/USER	Name of the Findings i.e. Prostate, Lesion1, Lesion 2, etc., as automatically given by the system or updated by the user in the system	ALWAYS	
>ROI Generation Algorithm	(3006,0036)	AUTO	MANUAL	ALWAYS	

Table 17 lists all Attributes that are supported in the ROI Contour Module

Table 16: ROI Contour Module

Attribute	Tag	Source	Value	Presence	Comments
ROI Contour Sequence	(3006,0039)	AUTO		ALWAYS	
>ROI Display Color	(3006,002A)	AUTO	RGB triplet color representation for both prostate and lesions.	ALWAYS	
>Contour Sequence	(3006,0040)	AUTO		ALWAYS	
>>Contour Image Sequence	(3006,0016)	AUTO		ALWAYS	
>>>Referenced SOP Class UID	(0008,1150)	AUTO	SOP class UID of the image having the Contour Data	ALWAYS	
>>>Referenced SOP Instance UID	(0008,1155)	COPY	Copied from source image	ALWAYS	
>>Contour Geometric Type	(3006,0042)	AUTO	CLOSED_PLANAR	ALWAYS	
>>Number of Contour Points	(3006,0046)	AUTO	Number of points in Contour Data (3006,0050)	ALWAYS	
>>Contour Number	(3006,0048)	AUTO	Identification number of the contour starting from 1. The value of Contour Number shall be unique within the Contour Sequence in which it is defined.	ALWAYS	
>>Contour Data	(3006,0050)	AUTO	Sequence of (x,y,z) triplets defining a contour which is result of the algorithm/modified by the user.	ALWAYS	
>Referenced ROI Number	(3006,0084)	AUTO		ALWAYS	

Table 18 lists all Attributes that are supported in the RT ROI Observations Module

Table 17: RT ROI Observations Module

Attribute	Tag	Source	Value	Presence	Comments
RT ROI Observations Sequence	(3006,0080)	AUTO		ALWAYS	
>Observation Number	(3006,0082)	AUTO		ALWAYS	
>Referenced ROI Number	(3006,0084)	AUTO		ALWAYS	
>RT ROI Identification Code Sequence	(3006,0086)	AUTO		ALWAYS	
>RT ROI Interpreted Type	(3006,00A4)	AUTO	ORGAN	ALWAYS	
>ROI Interpreter	(3006,00A6)	AUTO		EMPTY	

Table 19 lists all Attributes that are supported in the Approval Module

Table 18: Approval Module

Attribute	Tag	Source	Value	Presence	Comments
Approval Status	(300E,0002)	AUTO	UNAPPROVED	ALWAYS	

Table 20 lists all Attributes that are supported in the SOP Common Module

Table 19: SOP Common Module

Attribute	Tag	Source	Value	Presence	Comments
Specific Character Set	(0008,0005)	COPY	Copied from input image	VNAP	
Instance Creation Date	(0008,0012)	AUTO	Date when series is created	ALWAYS	
Instance Creation Time	(0008,0013)	AUTO	Time when series is created	ALWAYS	
SOP Class UID	(0008,0016)	AUTO	RT Structure Set - 1.2.840.10008.5.1.4.1.1.481.3 Secondary Capture Image Storage - 1.2.840.10008.5.1.4.1.1.7 MR Image Storage - 1.2.840.10008.5.1.4.1.1.4	ALWAYS	
SOP Instance UID	(0008,0018)	AUTO	Unique Identifier of the instance	ALWAYS	
Timezone Offset from UTC	(0008,0201)	AUTO	Copied from the input image. If not present, then it is local UTC offset.	ALWAYS	

8.1.1.2 Secondary Capture Image Storage

Table 20: SC Image IOD Modules

Information Entity	Module	Reference	Presence of Module
Patient	Patient	Table 10	ALWAYS
Study	General Study	Table 11	ALWAYS
	Patient Study	Table 12	ALWAYS
Series	General Series	Table 22	ALWAYS
Equipment	General Equipment	Table 15	ALWAYS
	SC Equipment	Table 23	ALWAYS
Image	General Image	Table 24	ALWAYS
	Image Pixel	Table 25	ALWAYS
	SC Image	Table 26	ALWAYS
	SOP Common	Table 20	ALWAYS

Table 22 lists all Attributes that are supported in the General Series IOD Module

Table 21: General Series IOD Modules

Attribute	Tag	Source	Value	Presence	Comments
Series Date	(0008,0021)	AUTO	Date when series is created	ALWAYS	
Series Time	(0008,0031)	AUTO	Time when series is created	ALWAYS	
Modality	(0008,0060)	AUTO	RT Structure Set: RTSTRUCT Secondary Capture: MR MR Burnt-in Images Report: MR	ALWAYS	
Series Description	(0008,103E)	AUTO	RT Structure Set: RTSS_PROSTATE_<Input Series Description>_<Series Date>_<Series Time> SeriesDate and SeriesTime are fetched from relativeDateTime used when input data has TimezoneOffsetFromU	ALWAYS	

Attribute	Tag	Source	Value	Presence	Comments
			TC tag present		
			Secondary Capture: <Input Series Description >_REPORT		
			MR Burnt-in Images Report: <Input Series Description >_SEG		
Performing Physician's Name	(0008,1050)	COPY	Copied from input image	ANAP	
Operators Name	(0008,1070)	AUTO	EMPTY	ANAP	
Body Part Examined	(0018,0015)	COPY	Copied from input image	VNAP	
Protocol Name	(0018,1030)	COPY	Copied from input image	ANAP	
Patient Position	(0018,5100)	COPY	Copied from input image	VNAP	
Series Instance UID	(0020,000E)	AUTO	Unique identifier of the series.	ALWAYS	
Series Number	(0020,0011)	AUTO	RT Structure Set: 1 Secondary Capture: 1 MR Burnt-in Images Report: 1	ALWAYS	
Performed Procedure Step Start Date	(0040,0244)	COPY	<Study Date>	ANAP	
Performed Procedure Step Start Time	(0040,0245)	COPY	<Study Time>	ANAP	
Performed Procedure Step Start ID	(0040,0253)	COPY	Copied from input image	ANAP	
Performed Procedure Step Description	(0040,0254)	COPY	Copied from input image	ANAP	

Table 23 lists all Attributes that are supported in the SC Equipment Module

Table 22: SC Equipment Modules

Attribute	Tag	Source	Value	Presence	Comments
Conversion Type	(0008,0064)	AUTO	SYN	ALWAYS	

Table 24 lists all Attributes that are supported in the General Image Module

Table 23: General Image Modules

Attribute	Tag	Source	Value	Presence	Comments
Image Type	(0008,0008)	AUTO	DERIVED\SECONDARY\OTHER\ REPORT	ALWAYS	
Content Date	(0008, 0023)	AUTO	Date when series is created	ALWAYS	
Content Time	(0008,0033)	AUTO	Time when series is created	ALWAYS	
Instance Number	(0020,0013)	AUTO	Report frame number or input image frame number for MR Burnt-in Images Report	ALWAYS	
Patient Orientation	(0020,0020)	COPY	Copied from input image	VNAP	

Table 25 lists all Attributes that are supported in the Image Pixel Module

Table 24: Image pixel Modules

Attribute	Tag	Source	Value	Presence	Comments
Samples per Pixel	(0028,0002)	AUTO	3	ALWAYS	
Photometric Interpretation	(0028,0004)	COPY	RGB	ALWAYS	
Planar Configuration	(0028,0006)	AUTO	0	ALWAYS	
Rows	(0028,0010)	AUTO	512	ALWAYS	
Columns	(0028,0011)	AUTO	650	ALWAYS	
Bits Allocated	(0028,0100)	AUTO	8	ALWAYS	
Bits Stored	(0028,0101)	AUTO	8	ALWAYS	
High Bit	(0028,0102)	AUTO	7	ALWAYS	
Pixel Representation	(0028,0103)	AUTO	0	ALWAYS	
Pixel Data	(7FE0,0010)	AUTO	A data stream of the pixel samples that comprise the Image	ALWAYS	

Table 26 lists all Attributes that are supported in the SC Image Module

Table 25: SC Image Modules

Attribute	Tag	Source	Value	Presence	Comments
Pixel Spacing	(0028,0030)	COPY	Copied from input image	ALWAYS	

8.1.1.3 MR Image Storage

Table 26 MR Image IOD Modules

Information Entity	Module	Reference	Presence of Module
Patient	Patient	Table 10	ALWAYS
Study	General Study	Table 11	ALWAYS
	Patient Study	Table 12	ALWAYS
Series	General Series	Table 22	ALWAYS
Frame of Reference	Frame of Reference	Table 30	ALWAYS
Equipment	General Equipment	Table 15	ALWAYS
Image	General Image	Table 24	ALWAYS
	Image Plane	Table 28	ALWAYS
	Image Pixel	Table 25	ALWAYS
	MR Image	Table 29	ALWAYS
	SOP Common	Table 20	ALWAYS

Table *28* lists all Attributes that are supported in the Image Plane Module

Table 27 Image Plane Module

Attribute	Tag	Source	Value	Presence	Comments
Pixel Spacing	(0028, 0030)	COPY	Copied from input image	ALWAYS	
Image Orientation	(0028, 0037)	COPY	Copied from input image	ALWAYS	
Image Position	(0028, 0032)	COPY	Copied from input image	ALWAYS	
Slice Thickness	(0018, 0050)	COPY	Copied from input image	VNAP	
Slice Location	(0020, 1041)	COPY	Copied from input image	ANAP	

Table *29* lists all Attributes that are supported in the MR Image module

Table 28 MR Image Module

Attribute	Tag	Source	Value	Presence	Comments
Image Type	(0008,0008)	AUTO	DERIVED\SECONDARY\OTHER\ MASKED	ALWAYS	
Samples per Pixel	(0028,0002)	COPY	Copied from input image	ALWAYS	
Photometric Interpretation	(0028,0004)	COPY	Copied from input image	ALWAYS	
Bits Allocated	(0028,0100)	COPY	Copied from input image	ALWAYS	
Scanning Sequence	(0018,0020)	COPY	Copied from input image	ALWAYS	
Sequence Variant	(0018,0021)	COPY	Copied from input image	ALWAYS	
Scan Options	(0018,0022)	COPY	Copied from input image	VNAP	

Attribute	Tag	Source	Value	Presence	Comments
MR Acquisition Type	(0018,0023)	COPY	Copied from input image	VNAP	
Repetition Time	(0018,0080)	COPY	Copied from input image	VNAP	
Echo Time	(0018,0081)	COPY	Copied from input image	VNAP	
Echo Train Length	(0018,0091)	COPY	Copied from input image	VNAP	

Table 29 Frame of Reference Module Attributes

Attribute	Tag	Source	Value	Presence	Comments
Frame of Reference UID	(0020,0052)	COPY	Copied from input image	ALWAYS	
Position Reference Indicator	(0020,1040)	COPY	Copied from input image	VNAP	

8.1.2 Usage of Attributes from Received IODs

NOT APPLICABLE

8.1.3 Attribute Mapping

NOT APPLICABLE

8.1.4 Coerced/Modified Fields

NOT APPLICABLE

8.2 Data Dictionary of Private Attributes

Table 31 lists all private attributes created by AI-Rad Companion Prostate MR which may be included in the generated instances.

Table 30 Private Data Element Dictionary

Attribute	Private Owner Code	Name	VR	VM	Description
(0021, xx01)	SIEMENS MR SDR 01	CreatorIdentifier	LO	1	Character string
(0021, xx02)	SIEMENS MR SDR 01	ApplicationIdentifier	LO	1	Character string
(0021, xx01)	SIEMENS MR AIRC	glandVolume	FD	1	Floating point double value (ml)
(0021, xx02)	SIEMENS MR AIRC	psa	FD	1	Floating point double value (ng/ml)
(0021, xx03)	SIEMENS MR AIRC	psaDensity	FD	1	Floating point double value (ng/ml2)

8.3 Coded Terminology and Templates

8.3.1 Context Groups

NOT APPLICABLE

8.3.2 Template Specifications

NOT APPLICABLE

8.3.3 Private Code definitions

AI-Rad Companion Prostate MR uses the private coding scheme designator 99SHSAIRC_STRUCTCODE to identify Prostate assessment in the system.

8.4 Grayscale Image Consistency

NOT APPLICABLE

8.5 Standard Extended / Specialized / Private SOP Classes

NOT APPLICABLE

8.6 Private Transfer Syntaxes

NOT APPLICABLE

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Published by Siemens Healthineers AG· ©Siemens Healthineers AG, 2025