EMR - MANAGER

Version 10
DICOM Conformance Statement

Version 4.00, January 2022

1   Conformance Statement Overview

The application described in this conformance statement, *VEPRO EMR Manager PACS*, is a collection of processes that form up a complete PACS solution.

The *VEPRO EMR Manager PACS* application conforms to the DICOM 3.0 standard as stated in this document.

VEPRO EMR Manager PACS provides standard conformance to the DICOM SOP classes listed in the table below. Fields marked as "Option" either require a special configuration or the purchase of optional Software modules.

Table 1.1: NETWORK Services

SOP Classes	User of Service (SCU)	Provider of Service (SCP)
Verification		
Verification	Yes	Yes
Transfer		
Computed Radiography Image Storage	Yes	Yes
Digital X-Ray Image Storage – For Presentation	Yes	Yes
Digital X-Ray Image Storage – For Processing	Yes	Yes
Digital Mammography X-Ray Image Storage - For Presentation	Yes	Yes
Digital Mammography X-Ray Image Storage - For Processing	Yes	Yes
Digital Intra-Oral X-Ray Image Storage - For Presentation	Yes	Yes
Digital Intra-Oral X-Ray Image Storage - For Processing	Yes	Yes
CT Image Storage	Yes	Yes
Enhanced CT Image Storage	Yes	Yes
Ultrasound Multi-frame Image Storage (Retired)	*Yes*	*Yes*
Ultrasound Multi-frame Image Storage	Yes	Yes
MR Image Storage	Yes	Yes
Enhanced MR Image Storage	Yes	Yes
Nuclear Medicine Image Storage (Retired)	*Yes*	*Yes*
Ultrasound Image Storage (Retired)	*Yes*	*Yes*
Ultrasound Image Storage	Yes	Yes
Secondary Capture Image Storage	Yes	Yes
Multi-frame Single Bit SC Image Storage	Yes	Yes
Multi-frame Grayscale Byte SC Image Storage	Yes	Yes
Multi-frame Grayscale Word SC Image Storage	Yes	Yes
Multi-frame True Color SC Image Storage	Yes	Yes
Standalone Curve Storage (Retired)	*Yes*	*Yes*
12-lead ECG waveform Storage	Yes	Yes
General ECG Waveform Storage	Yes	Yes
Ambulatory ECG Waveform Storage	Yes	Yes
Hemodynamic Waveform Storage	Yes	Yes
Cardiac Electrophysiology Waveform Storage	Yes	Yes
Standalone VOI LUT Storage (Retired)	*Yes*	*Yes*
Grayscale Softcopy Presentation State Storage	Yes	Yes
X-Ray Angiographic Image Storage	Yes	Yes
X-Ray Radiofluoroscopic Image Storage	Yes	Yes
X-Ray Angiographic Bi-Plane Image Storage SOP Class (Retired)	*Yes*	*Yes*
Breast Tomosynthesis Image Storage	Yes	Yes
Nuclear Medicine Image Storage	Yes	Yes

SOP Classes	User of Service (SCU)	Provider of Service (SCP)
VL Image Storage (Retired)	*Yes*	*Yes*
VL Endoscopic Image Storage	Yes	Yes
Video Endoscopic Image Storage	Yes	Yes
VL Microscopic Image Storage	Yes	Yes
Video Microscopic Image Storage	Yes	Yes
VL Slice-coordinates Microscopic Image Storage	Yes	Yes
VL Photographic Image Storage	Yes	Yes
Video Photographic Image Storage	Yes	Yes
VL Multi-frame Image Storage (Retired)	*Yes*	*Yes*
Basic Text SR	Yes	Yes
Enhanced SR	Yes	Yes
Comprehensive SR	Yes	Yes
Key Object Selection Document	Yes	Yes
X-Ray Radiation Dose SR	Yes	Yes
Positron Emission Tomography Image Storage	Yes	Yes
Encapsulated PDF Storage	Yes	Yes
Encapsulated CDA Storage	Yes	Yes
RT Image Storage	Yes	Yes
RT Dose Storage	Yes	Yes
RT Structure Set Storage	Yes	Yes
RT Beams Treatment Record Storage	Yes	Yes
RT Plan Storage	Yes	Yes
RT Brachy Treatment Storage	Yes	Yes
RT Treatment Summary Record Storage	Yes	Yes
Computed Radiography Image Storage	Yes	Yes
Digital X-Ray Image Storage – For Presentation	Yes	Yes
Query/Retrieve		
Patient Root Query/Retrieve Information Model - FIND	No	Option
Patient Root Query/Retrieve Information Model - MOVE	No	Option
Study Root Query/Retrieve Information Model - FIND	Option	Option
Study Root Query/Retrieve Information Model - MOVE	Option	Option
Print Management		
Basic Grayscale Print Management Meta	Option	No
Basic Color Print Management Meta	Option	No
Workflow Management		
Storage Commitment Push Model	Option	Option
Modality Performed Procedure Step	Option	Option
Modality Worklist Information Model - FIND	Option	Option

Table 1.2: MEDIA Services

Media Storage Application Profile	Write Files (FSC or FSU)	Read Files (FSR)
Compact Disk - Recordable		
General Purpose CD-R	Yes	Yes
General Purpose DVD with JPEG on CD-R Media	Yes	No
Basic Cardiac X-Ray Angiographic Studies on CD-R Media	No	Yes
1024 X-Ray Angiographic Studies on CD-R Media	No	Yes
CT/MR Studies on CD-R	No	Yes
DVD		

Media Storage Application Profile	Write Files (FSC or FSU)	Read Files (FSR)
General Purpose DVD with JPEG	Option	No
General Purpose DVD with JPEG 2000	No	Yes
CT/MR Studies on DVD Media	No	Yes

2 Table of Contents

3   Introduction

The application described in this conformance statement *VEPRO EMR Manager PACS* allows the transfer of SOP instances between this application and other DICOM Application Entities (AE). This application acts as a service class user (SCU) and as a service class provider (SCP) for several DICOM service classes.

3.1   Audience

This document is written for the people that need to understand how *VEPRO EMR Manager PACS* will integrate into their healthcare facility.

The purpose of this document is to describe how the product behaves in a DICOM network environment, together with other application entities that conform to the DICOM standard and how data is exchanged.

3.2   Abbreviations

AE   Application Entity
AET   Application Entity Title
CD-R   Compact Disk Recordable
CR   Computed Radiography
CT   Computed Tomography
DICOM   Digital Imaging and Communications in Medicine
DVD   Digital Versatile Disk
DX   Digital X-ray
FSC   File-Set Creator
FSU   File-Set Updater
FSR   File-Set Reader
HIS   Hospital Information System
IOD   Information Object Definition
IP   Internet Protocol
ISO   International Organization for Standards
LUT   Look-up Table
MG   Mammography (X-ray)
MPPS   Modality Performed Procedure Step
MR   Magnetic Resonance Imaging
MTU   Maximum Transmission Unit
MWL   Modality Worklist
NM   Nuclear Medicine
OSI   Open Systems Interconnection
PACS   Picture Archiving and Communication System
PET   Positron Emission Tomography
PDF   Portable Document Format
PDU   Protocol Data Unit
RF   Radiofluoroscopy
RIS   Radiology Information System.
RT   Radiotherapy
SC   Secondary Capture
SCP   Service Class Provider
SCU   Service Class User
SOP   Service-Object Pair
SR   Structured Reporting
TCP/IP   Transmission Control Protocol/Internet Protocol
US   Ultrasound
VL   Visible Light
VR   Value Representation
XA   X-ray Angiography

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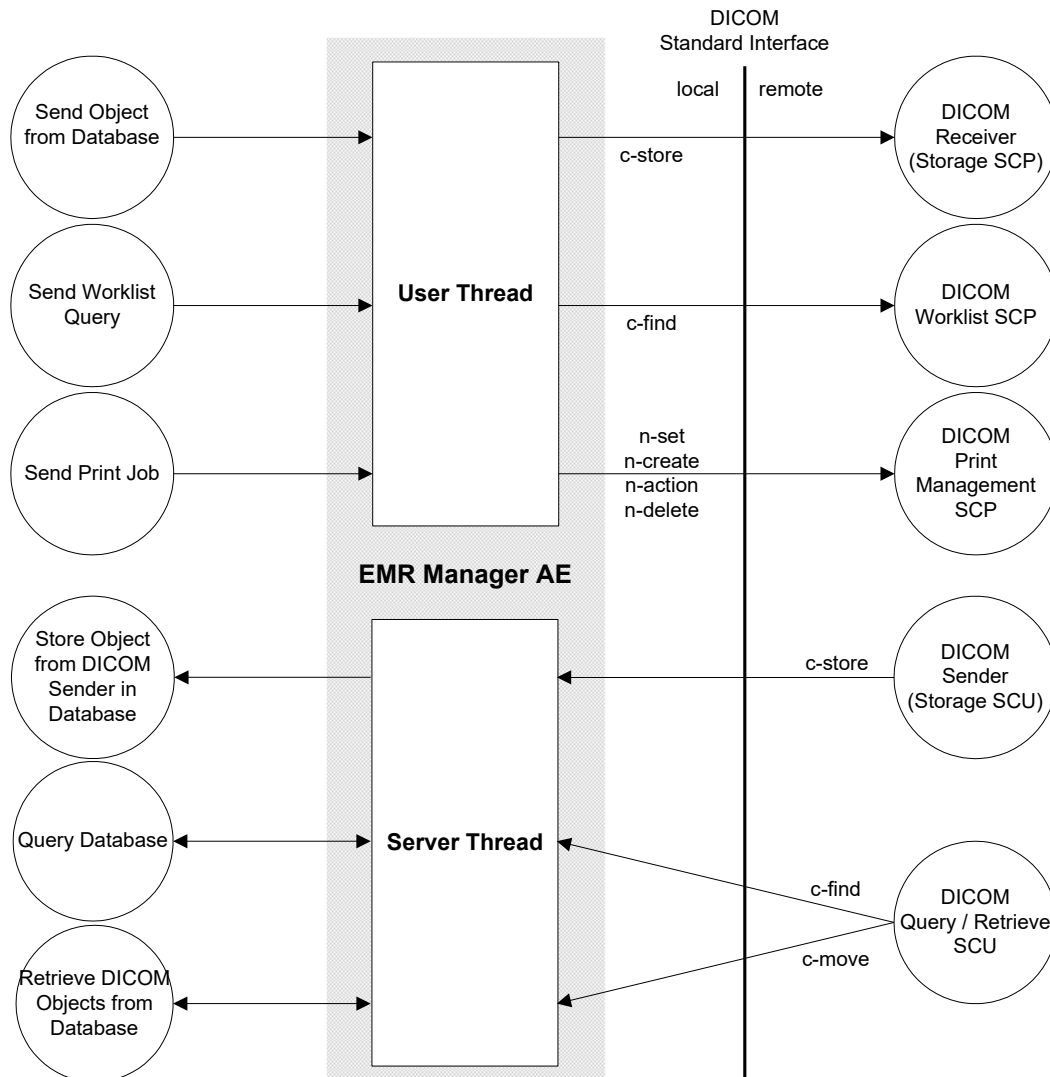
4.1 Implementation Model

The *VEPRO EMR Manager* software is implemented as one DICOM Application Entity that receives associations from remote Application Entities.

The *VEPRO EMR Manager* Application Entity originates associations for transmission of DICOM Normalized and Composite Information Objects to remote Application Entities.

4.1.1 Application Data Flow Diagram

4.1.2 Functional definitions of Application Entities

The *VEPRO EMR Manager* software main application forks child threads for handling user interface actions (*User Thread*) and waiting for associations from a remote AE (*Server Thread*).

The *User Thread* acting as a service class user (SCU) initiates associations for DICOM Verification service Class, Storage Service Class, Basic Worklist Management Service Class and Print Management Service Class to remote AEs.

The *Server Thread* acting as a service class provider (SCP) accepts associations for DICOM Verification Service Class, Storage Service Class, Storage Commitment Service Class or Query/Retrieve Service Class from a remote AE.

4.2 Application Entity Specifications

4.2.1 VEPRO EMR Manager AE Specification

4.2.1.1 SOP Classes

The *VEPRO EMR Manager* software provides standard Conformance to the DICOM V3.0 SOP Classes listed in table 4.1:

Table 4.1: Supported SOP Classes

SOP Class Name	SOP Class UID	SCU	SCP
Verification			
Verification	1.2.840.10008.1.1	Yes	Yes
Storage			
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1	Yes	Yes
Digital X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.1	Yes	Yes
Digital X-Ray Image Storage – For Processing	1.2.840.10008.5.1.4.1.1.1.1.1	Yes	Yes
Digital Mammography X-Ray Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.2	Yes	Yes
Digital Mammography X-Ray Image Storage - For Processing	1.2.840.10008.5.1.4.1.1.1.2.1	Yes	Yes
Digital Intra-Oral X-Ray Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.3	Yes	Yes
Digital Intra-Oral X-Ray Image Storage - For Processing	1.2.840.10008.5.1.4.1.1.1.3.1	Yes	Yes
CT Image Storage	1.2.840.10008.5.1.4.1.1.2	Yes	Yes
Enhanced CT Image Storage	1.2.840.10008.5.1.4.1.1.2.1	Yes	Yes
Ultrasound Multi-frame Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.3*	*Yes*	*Yes*
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	Yes	Yes
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	Yes	Yes
Enhanced MR Image Storage	1.2.840.10008.5.1.4.1.1.4.1	Yes	Yes
Nuclear Medicine Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.5*	*Yes*	*Yes*
Ultrasound Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.6*	*Yes*	*Yes*
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1	Yes	Yes
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	Yes	Yes
Multi-frame Single Bit SC Image Storage	1.2.840.10008.5.1.4.1.1.7.1	Yes	Yes
Multi-frame Grayscale Byte SC Image Storage	1.2.840.10008.5.1.4.1.1.7.2	Yes	Yes
Multi-frame Grayscale Word SC Image Storage	1.2.840.10008.5.1.4.1.1.7.3	Yes	Yes
Multi-frame True Color SC Image Storage	1.2.840.10008.5.1.4.1.1.7.4	Yes	Yes
Standalone Curve Storage (Retired)	*1.2.840.10008.5.1.4.1.1.9*	*Yes*	*Yes*
12-lead ECG waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.1	Yes	Yes
General ECG Waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.2	Yes	Yes
Ambulatory ECG Waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.3	Yes	Yes
Hemodynamic Waveform Storage	1.2.840.10008.5.1.4.1.1.9.2.1	Yes	Yes
Cardiac Electrophysiology Waveform Storage	1.2.840.10008.5.1.4.1.1.9.3.1	Yes	Yes
Standalone VOI LUT Storage (Retired)	*1.2.840.10008.5.1.4.1.1.11*	*Yes*	*Yes*

Grayscale Softcopy Presentation State Storage	1.2.840.10008.5.1.4.1.1.11.1	Yes	Yes
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1	Yes	Yes
X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2	Yes	Yes
X-Ray Angiographic Bi-Plane Image Storage SOP Class (Retired)	*1.2.840.10008.5.1.4.1.1.12.3*	*Yes*	*Yes*
Breast Tomosynthesis Image Storage	1.2.840.10008.5.1.4.1.1.13.1.3	Yes	Yes
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20	Yes	Yes
VL Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.77.1*	*Yes*	*Yes*
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1	Yes	Yes
Video Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1.1	Yes	Yes
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2	Yes	Yes
Video Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2.1	Yes	Yes
VL Slice-coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3	Yes	Yes
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	Yes	Yes
Video Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4.1	Yes	Yes
VL Multi-frame Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.77.2*	*Yes*	*Yes*
Basic Text SR	1.2.840.10008.5.1.4.1.1.88.11	Yes	Yes
Enhanced SR	1.2.840.10008.5.1.4.1.1.88.22	Yes	Yes
Comprehensive SR	1.2.840.10008.5.1.4.1.1.88.33	Yes	Yes
Key Object Selection Document	1.2.840.10008.5.1.4.1.1.88.59	Yes	Yes
X-Ray Radiation Dose SR	1.2.840.10008.5.1.4.1.1.88.67	Yes	Yes
Encapsulated PDF Storage	1.2.840.10008.5.1.4.1.1.104.1	Yes	Yes
Encapsulated CDA Storage	1.2.840.10008.5.1.4.1.1.104.2	Yes	Yes
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128	Yes	Yes
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	Yes	Yes
RT Dose Storage	1.2.840.10008.5.1.4.1.1.481.2	Yes	Yes
RT Structure Set Storage	1.2.840.10008.5.1.4.1.1.481.3	Yes	Yes
RT Beams Treatment Record Storage	1.2.840.10008.5.1.4.1.1.481.4	Yes	Yes
RT Plan Storage	1.2.840.10008.5.1.4.1.1.481.5	Yes	Yes
RT Brachy Treatment Storage	1.2.840.10008.5.1.4.1.1.481.6	Yes	Yes
RT Treatment Summary Record Storage	1.2.840.10008.5.1.4.1.1.481.7	Yes	Yes
Query/Retrieve			
Patient Root Query/Retrieve Information Model - FIND	1.2.840.10008.5.1.4.1.2.1.1	No	Yes
Patient Root Query/Retrieve Information Model - MOVE	1.2.840.10008.5.1.4.1.2.1.2	No	Yes
Study Root Query/Retrieve Information Model - FIND	1.2.840.10008.5.1.4.1.2.2.1	Yes	Yes
Study Root Query/Retrieve Information Model - MOVE	1.2.840.10008.5.1.4.1.2.2.2	Yes	Yes
Print Management			
Basic Grayscale Print Management Meta	1.2.840.10008.5.1.1.9	Yes	No
Basic Color Print Management Meta	1.2.840.10008.5.1.1.18	Yes	No
Workflow Management			
Storage Commitment Push Model	1.2.840.10008.1.20.1	Yes	Yes
Modality Performed Procedure Step	1.2.840.10008.3.1.2.3.3	Yes	Yes
Modality Worklist Information Model - FIND	1.2.840.10008.5.1.4.31	Yes	Yes

4.2.1.2 Association Policies

4.2.1.2.1 General

The Application Entity Title, the port number and the TCP/IP address of the remote Application Entities are defined in the configuration file of the *VEPRO EMR Manager* software.

The Port Number(s) to which the SCP is listening on can be configured in a configuration file of the *VEPRO EMR Manager* software.

4.2.1.2.2 Number of Associations

The *VEPRO EMR Manager* software supports multiple associations.

By default, the *User Thread* only initiates one association at a time, but it can be configured to initiate multiple associations at the same time.

The *Server Thread* accepts more than one association at a time. Associations are accepted if there are enough system resources available on the local host.

4.2.1.2.3 Asynchronous Nature

This version of the *VEPRO EMR Manager* software does not support asynchronous communication.

4.2.1.2.4 Implementation Identifying Information

The *VEPRO EMR Manager* software provides the following Implementation Identifying Information:

- Application Context Name is set to "1.2.840.100008.3.1.1.1
- Implementation Class UID is set to "1.2.276.0.19.1996.1"
- Implementation Version Name is set to "VTServer 4.32"

4.2.1.3 Association Initiation Policy

4.2.1.3.1 Activity - Send Echo

4.2.1.3.1.1 Description and Sequencing of Activity

The user needs to press the "Send DICOM Echo" button for sending C-Echo request to a remote AE. The destination host is selected from a list of configured remote AEs.

4.2.1.3.1.2 Proposed Presentation Contexts

The *EMR Manager* software will propose Presentation Contexts as shown in the following table:

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended
Name	UID	Name List	UID List		Negotiat.
Verification	1.2.840.10008.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	None

4.2.1.3.2 Activity - Send Images and related Objects to a Remote Node

4.2.1.3.2.1 Description and Sequencing of Activity

The user selects SOP Instances from one or more Patients or Studies to a pickup list for network transfer. The destination host is selected from a list of configured remote AEs. The *User Thread* initiates a C-Store request after initiating the "DICOM send" function. The *User Thread* reads the objects, converts them if necessary, initiates an association, transfers them to the remote AE and closes the association.

If the C-Store Response from the remote Application contains a status other than success, the association is aborted. After a configurable time period, the transfer is started again. This happens until the C-Store succeeds or a configurable number of retries is reached.

4.2.1.3.2.2 Proposed Presentation Contexts

The *EMR Manager* software will propose Presentation Contexts as shown in the following table:

Presentation Context Table				
Abstract Syntax		**Transfer Syntax**	**Role**	**Extended**
Name	**UID**			**Negotiat.**
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1	See TRN table 2 below	SCU	none
Digital X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.1	See TRN table 2 below	SCU	none
Digital X-Ray Image Storage – For Processing	1.2.840.10008.5.1.4.1.1.1.1.1	See TRN table 2 below	SCU	none
Digital Mammography X-Ray Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.2	See TRN table 2 below	SCU	none
Digital Mammography X-Ray Image Storage - For Processing	1.2.840.10008.5.1.4.1.1.1.2.1	See TRN table 2 below	SCU	none
Digital Intra-Oral X-Ray Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.3	See TRN table 2 below	SCU	none
Digital Intra-Oral X-Ray Image Storage - For Processing	1.2.840.10008.5.1.4.1.1.1.3.1	See TRN table 2 below	SCU	none
CT Image Storage	1.2.840.10008.5.1.4.1.1.2	See TRN table 2 below	SCU	none
Enhanced CT Image Storage	1.2.840.10008.5.1.4.1.1.2.1	See TRN table 2 below	SCU	none
Ultrasound Multi-frame Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.3*	*See TRN table 3 below*	*SCU*	*none*
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	See TRN table 3 below	SCU	none
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	See TRN table 2 below	SCU	none
Enhanced MR Image Storage	1.2.840.10008.5.1.4.1.1.4.1	See TRN table 2 below	SCU	none
MR Spectroscopy Storage	1.2.840.10008.5.1.4.1.1.4.2	See TRN table 2 below	SCU	none
Nuclear Medicine Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.5*	*See TRN table 2 below*	*SCU*	*none*
Ultrasound Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.6*	*See TRN table 3 below*	*SCU*	*none*
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1	See TRN table 3 below	SCU	none
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	See TRN table 2 below	SCU	none
Multi-frame Single Bit SC Image Storage	1.2.840.10008.5.1.4.1.1.7.1	See TRN table 1 below	SCU	none
Multi-frame Grayscale Byte SC Image Storage	1.2.840.10008.5.1.4.1.1.7.2	See TRN table 2 below	SCU	none
Multi-frame Grayscale Word SC Image Storage	1.2.840.10008.5.1.4.1.1.7.3	See TRN table 2 below	SCU	none
Multi-frame True Color SC Image Storage	1.2.840.10008.5.1.4.1.1.7.4	See TRN table 2 below	SCU	none
Standalone Curve Storage (Retired)	*1.2.840.10008.5.1.4.1.1.9*	*See TRN table 1 below*	*SCU*	*none*
12-lead ECG waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.1	See TRN table 1 below	SCU	none
General ECG Waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.2	See TRN table 1 below	SCU	none
Ambulatory ECG Waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.3	See TRN table 1 below	SCU	none
Hemodynamic Waveform Storage	1.2.840.10008.5.1.4.1.1.9.2.1	See TRN table 1 below	SCU	none
Cardiac Electrophysiology Waveform Storage	1.2.840.10008.5.1.4.1.1.9.3.1	See TRN table 1 below	SCU	none
Standalone VOI LUT Storage (Retired)	*1.2.840.10008.5.1.4.1.1.11*	*See TRN table 1 below*	*SCU*	*none*
Grayscale Softcopy Presentation State Storage	1.2.840.10008.5.1.4.1.1.11.1	See TRN table 1 below	SCU	none
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1	See TRN table 2 below	SCU	none

X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2	See TRN table 2 below	SCU	none
X-Ray Angiographic Bi-Plane Image Storage SOP Class (Retired)	*1.2.840.10008.5.1.4.1.1.12.3*	*See TRN table 2 below*	*SCU*	*none*
Breast Tomosynthesis Image Storage	1.2.840.10008.5.1.4.1.1.13.1.3	See TRN table 2 below	SCU	none
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20	See TRN table 2 below	SCU	none
VL Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.77.1*	*See TRN table 2 below*	*SCU*	*none*
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1	See TRN table 2 below	SCU	none
Video Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1.1	See TRN table 4 below	SCU	none
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2	See TRN table 2 below	SCU	none
Video Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2.1	See TRN table 4 below	SCU	none
VL Slice-coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3	See TRN table 2 below	SCU	none
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	See TRN table 2 below	SCU	none
Video Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4.1	See TRN table 4 below	SCU	none
VL Multi-frame Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.77.2*	*See TRN table 2 below*	*SCU*	*none*
Basic Text SR	1.2.840.10008.5.1.4.1.1.88.11	See TRN table 1 below	SCU	none
Enhanced SR	1.2.840.10008.5.1.4.1.1.88.22	See TRN table 1 below	SCU	none
Comprehensive SR	1.2.840.10008.5.1.4.1.1.88.33	See TRN table 1 below	SCU	none
Key Object Selection Document	1.2.840.10008.5.1.4.1.1.88.59	See TRN table 1 below	SCU	none
X-Ray Radiation Dose SR	1.2.840.10008.5.1.4.1.1.88.67	See TRN table 1 below	SCU	none
Encapsulated PDF Storage	1.2.840.10008.5.1.4.1.1.104.1	See TRN table 1 below	SCU	none
Encapsulated CDA Storage	1.2.840.10008.5.1.4.1.1.104.2	See TRN table 1 below	SCU	none
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128	See TRN table 2 below	SCU	none
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	See TRN table 2 below	SCU	none
RT Dose Storage	1.2.840.10008.5.1.4.1.1.481.2	See TRN table 1 below	SCU	none
RT Structure Set Storage	1.2.840.10008.5.1.4.1.1.481.3	See TRN table 1 below	SCU	none
RT Beams Treatment Record Storage	1.2.840.10008.5.1.4.1.1.481.4	See TRN table 1 below	SCU	none
RT Plan Storage	1.2.840.10008.5.1.4.1.1.481.5	See TRN table 1 below	SCU	none
RT Brachy Treatment Storage	1.2.840.10008.5.1.4.1.1.481.6	See TRN table 1 below	SCU	none
RT Treatment Summary Record Storage	1.2.840.10008.5.1.4.1.1.481.7	See TRN table 1 below	SCU	none
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1	See TRN table 2 below	SCU	none
Digital X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.1	See TRN table 2 below	SCU	none

TRN table 1:

Transfer Syntax Table	
Name	**UID**
Implicit VR Little Endian	1.2.840.10008.1.2
Explicit VR Little Endian	1.2.840.10008.1.2.1
Explicit VR Big Endian	1.2.840.10008.1.2.2

TRN table 2:

Transfer Syntax Table	
Name	**UID**
Implicit VR Little Endian	1.2.840.10008.1.2
Explicit VR Little Endian	1.2.840.10008.1.2.1
Explicit VR Big Endian	1.2.840.10008.1.2.2
JPEG Baseline Lossy 8 Bit Image Compression	1.2.840.10008.1.2.4.50
JPEG Lossless Image Compression	1.2.840.10008.1.2.4.70
JPEG 2000 Lossless Image Compression	1.2.840.10008.1.2.4.90
JPEG 2000 Lossy Image Compression	1.2.840.10008.1.2.4.91

TRN table 3:

Transfer Syntax Table	
Name	**UID**
Implicit VR Little Endian	1.2.840.10008.1.2
Explicit VR Little Endian	1.2.840.10008.1.2.1
Explicit VR Big Endian	1.2.840.10008.1.2.2

JPEG Baseline Lossy 8 Bit Image Compression	1.2.840.10008.1.2.4.50
JPEG Lossless Image Compression	1.2.840.10008.1.2.4.70
JPEG 2000 Lossless Image Compression	1.2.840.10008.1.2.4.90
JPEG 2000 Lossy Image Compression	1.2.840.10008.1.2.4.91
RLE Lossless	1.2.840.10008.1.2.5

TRN table 4:

Transfer Syntax Table	
Name	**UID**
MPEG2 Main Profile Main Level	1.2.840.10008.1.2.4.100
MPEG2 Main Profile High Level	1.2.840.10008.1.2.4.101
MPEG-4 AVC/H.264 High Profile / Level 4.1	1.2.840.10008.1.2.4.102
MPEG-4 AVC/H.264 BD-compatible High Profile / Level 4.1	1.2.840.10008.1.2.4.103

4.2.1.3.2.3   SOP Specific Conformance Statement to Storage SOP classes

The DICOM objects created by this application conform to the standard DICOM IOD definitions, but they may contain additional private elements which should be ignored by receiving remote AE.

4.2.1.3.3   Activity - Query Remote Database

4.2.1.3.3.1   Description and Sequencing of Activity

The associated activity is a C-FIND request initiated by the *VEPRO EMR Manager* software.

The user has to select the Remote AE that should execute the query and specify attributes used by the Remote AE to query its Database. A list of Studies that match the specified attributes is displayed as a result of the query.

The *EMR Manager* software *w*ill propose Presentation Contexts as shown in the following table:

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended**
Name	**UID**	**Name List**	**UID List**		**Negotiat.**
Study Root Query/Retrieve Information Model – FIND	1.2.840.10008.5.1.4.1.2.2.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	none

4.2.1.3.3.2 SOP Specific Conformance Statement for SOP Class Study Root Query/Retrieve Information Model – FIND

EMR Manager Software performs C-FIND operation only on STUDY level. The following attributes are included in the C-FIND operation:

Attribute Description	Tag
Query / Retrieve Level	(0008,0052)
Patient's Name	(0010,0010)
Patient ID	(0010,0020)
Patient's Birth Date	(0010,0030)
Patient's Sex	(0010,0040)
Study Instance UID	(0020,000D)
Study ID	(0020,0010)
Study Description	(0008,1030)
Study Date	(0008,0020)
Study Time	(0008,0030)
Study Comments	(0032,4000)
Modality	(0008,0060)
Modalities in Study	(0008,0061)
Number of Study Related Series	(0008,1206)
Number of Study Related Instances	(0008,1208)
Instance Availability	(0008,0056)
Admitting Date	(0038,0020)

4.2.1.3.4 Activity – Retrieve SOP Instances from Remote Database

4.2.1.3.4.1 Description and Sequencing of Activity

The associated activity is a C-MOVE request initiated by the *VEPRO EMR Manager* software.

The user has to select one or more Studies he wants to retrieve from the list generated as a result of a previous query of a Remote Database and confirm the selection

The Remote AE will then transfer the selected Instances in an subsequent C-STORE operation.

The *EMR Manager* software will propose Presentation Contexts as shown in the following table:

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended
Name	UID	Name List	UID List		Negotiat.
Study Root Query/Retrieve Information Model – MOVE	1.2.840.10008.5.1.4.1.2.2.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	none

4.2.1.3.4.2 SOP Specific Conformance Statement for SOP Class Study Root Query/Retrieve Information Model – MOVE

EMR Manager Software supports C-MOVE operation only on STUDY level. The following attributes are included in the C-MOVE operation:

Attribute Description	Tag
Query / Retrieve Level	(0008,0052)
Study Instance UID	(0020,000D)

4.2.1.3.5 Activity - Query Modality Worklist

4.2.1.3.5.1 Description and Sequencing of Activity

The associated activity is a C-Find request initiated by the *VEPRO EMR Manager* software. The user has to press a button for sending a query to the remote host.

4.2.1.3.5.2 Proposed Presentation Contexts

The *EMR Manager* software *w*ill propose Presentation Contexts as shown in the following table:

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended
Name	UID	Name List	UID List		Negotiat.
Modality Worklist Information Model – FIND	1.2.840.10008.5.1.4.31	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	none

4.2.1.3.5.3 SOP Specific Conformance Statement for SOP Class Modality Worklist Information Model – FIND

The following attributes are included in the C-FIND operation:

Attribute Description	Tag
Scheduled Procedure Step Sequence	(0040,0100)
> Scheduled Station AE Title	(0040,0001)
> Scheduled Procedure Step Start Date	(0040,0002)
> Scheduled Procedure Step Start Time	(0040,0003)
> Modality	(0008,0060)
> Scheduled Procedure Step Description	(0040,0007)
> Scheduled Protocol Code Sequence	(0004,0008)
> > Code Value	(0008,0100)
> > Coding Scheme Designator	(0008,0102)
> > Code Meaning	(0008,0104)
> Scheduled Procedure Step ID	(0040,0009)
Requested Procedure ID	(0040,1001)
Requested Procedure Description	(0032,1060)
Requested Procedure Code Sequence	(0032,1064)
> Code Value	(0008,0100)
> Coding Scheme Designator	(0008,0102)
> Code Meaning	(0008,0104)
Study Instance UID	(0020,000D)
Referenced Study Sequence	(0008,1110)
> Referenced SOP Class UID	(0008,1150)
> Referenced SOP Instance UID	(0008,1155)
Accession Number	(0008,0050)
Referring Physician's Name	(0008,0090)
Patient's Name	(0010,0010)
Patient ID	(0010,0020)
Patient's Birth Date	(0010,0030)
Patient's Sex	(0010,0040)

4.2.1.3.6 Activity - Print Images on a remote Imager

4.2.1.3.6.1 Description and Sequencing of Activity

The user selects SOP Instances from one or more patient to print them on a remote Imager. The user can select some options, e.g. number of copies.

4.2.1.3.6.2   Proposed Presentation Contexts

The EM*R Manager* software will propose Presentation Contexts as shown in the following table:

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended**
Name	**UID**	**Name List**	**UID List**		**Negotiat.**
Basic Grayscale Print Management Meta	1.2.840.10008.5.1.1.9	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	none
Basic Color Print Management Meta	1.2.840.10008.5.1.1.18	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	none

4.2.1.3.6.3   SOP Specific Conformance Statement for SOP Class Basic Grayscale Print Management Meta

The *EMR Manager* software supports the following mandatory and optional SOP Classes as defined by the Basic Grayscale Print Management Meta Class:

SOP Class Name	SOP Class UID
Basic Film Session SOP Class	1.2.840.10008.5.1.1.1
Basic Film Box SOP Class	1.2.840.10008.5.1.1.2
Basic Grayscale Image Box SOP Class	1.2.840.10008.5.1.1.4
Printer SOP Class	1.2.840.10008.5.1.1.16
Presentation LUT SOP Class	1.2.840.10008.5.1.1.23

No other optional SOP classes are currently supported.

The following Tables show the attributes included in the operations for the different SOP Classes. The values in the Usage column have the following meanings :

Usage Value	Meaning
A	Attribute is always sent
C	Attribute is only sent when specific conditions are met

Basic Film Session SOP Class Attributes

The following attributes are included in the N-CREATE operation:

Attribute Description	Tag	Usage
Number of Copies	(2000,0010)	A
Print Priority	(2000,0020)	C
Medium Type	(2000,0030)	C
Film Destination	(2000,0040)	C
Film Session Label	(2000,0050)	A
Memory Allocation	(2000,0060)	C

Basic Film Box SOP Class Attributes

The following attributes are included in the N-CREATE operation:

Attribute Description	Tag	Usage
Image Display Format	(2010,0010)	A
Referenced Film Session Sequence	(2010,0500)	A
> Referenced SOP Class UID	(0008,1150)	A
> Referenced SOP Instance UID	(0008,1155)	A
Referenced Presentation LUT Sequence	(2050,0500)	C
> Referenced SOP Class UID	(0008,1150)	C
> Referenced SOP Instance UID	(0008,1155)	C
Film Orientation	(2010,0040)	C
Film Size ID	(2010,0050)	C
Magnification Type	(2010,0060)	C
Min Density	(2010,0120)	C
Max Density	(2010,0130)	C
Configuration Information	(2010,0150)	C
Smoothing Type	(2010,0080)	C
Border Density	(2010,0100)	C
Empty Image Density	(2010,0110)	C
Trim	(2010,0140)	C
Illumination	(2010,015E)	C
Reflected Ambient Light	(2010,0160)	C

Basic Grayscale Image Box Attributes

The following attributes are included in the N-SET operation:

Attribute Description	Tag	Usage
Image Position	(2020,0010)	A
Basic Grayscale Image Sequence	(2020,0110)	A
> Samples per Pixel	(0028,0002)	A
> Photometric Interpretation	(0028,0004)	A
> Rows	(0028,0010)	A
> Columns	(0028,0011)	A
> Pixel Aspect Ratio	(0028,0034)	A
> Bits Allocated	(0028,0100)	A
> Bits Stored	(0028,0101)	A
> High Bit	(0028,0102)	A
> Pixel Representation	(0028,0103)	A
> Pixel Data	(7FE0,0010)	A

Presentation LUT Attributes

The following attributes are included in the N-CREATE operation:

Attribute Description	Tag	Usage
Presentation LUT Shape	(2050,0020)	A

SOP Specific Conformance Statement for SOP Class Basic Color Print Management Meta

The *EMR Manager* software supports the following mandatory and optional SOP Classes as defined by the Basic Color Print Management Meta Class:

SOP Class Name	SOP Class UID
Basic Film Session SOP Class	1.2.840.10008.5.1.1.1
Basic Film Box SOP Class	1.2.840.10008.5.1.1.2
Basic Color Image Box SOP Class	1.2.840.10008.5.1.1.4.1
Printer SOP Class	1.2.840.10008.5.1.1.16

No other optional SOP classes are currently supported.

The following Tables show the attributes included in the operations for the different SOP Classes. The values in the Usage column have the following meanings :

Usage Value	Meaning
A	Attribute is always sent
C	Attribute is only sent when specific conditions are met

Basic Film Session SOP Class Attributes

The following attributes are included in the N-CREATE operation:

Attribute Description	Tag	Usage
Number of Copies	(2000,0010)	A
Print Priority	(2000,0020)	C
Medium Type	(2000,0030)	C
Film Destination	(2000,0040)	C
Film Session Label	(2000,0050)	A
Memory Allocation	(2000,0060)	C

Basic Film Box SOP Class Attributes

The following attributes are included in the N-CREATE operation:

Attribute Description	Tag	Usage
Image Display Format	(2010,0010)	A
Referenced Film Session Sequence	(2010,0500)	A
> Referenced SOP Class UID	(0008,1150)	A
> Referenced SOP Instance UID	(0008,1155)	A
Referenced Presentation LUT Sequence	(2050,0500)	C
> Referenced SOP Class UID	(0008,1150)	C
> Referenced SOP Instance UID	(0008,1155)	C
Film Orientation	(2010,0040)	C
Film Size ID	(2010,0050)	C
Magnification Type	(2010,0060)	C
Min Density	(2010,0120)	C
Max Density	(2010,0130)	C
Configuration Information	(2010,0150)	C
Smoothing Type	(2010,0080)	C
Border Density	(2010,0100)	C
Empty Image Density	(2010,0110)	C
Trim	(2010,0140)	C
Illumination	(2010,015E)	C
Reflected Ambient Light	(2010,0160)	C

Basic Color Image Box Attributes

The following attributes are included in the N-SET operation:

Attribute Description	Tag	Usage
Image Position	(2020,0010)	A
Basic Color Image Sequence	(2020,0111)	A
> Samples per Pixel	(0028,0002)	A
> Photometric Interpretation	(0028,0004)	A
> Rows	(0028,0010)	A
> Columns	(0028,0011)	A
> Pixel Aspect Ratio	(0028,0034)	A
> Bits Allocated	(0028,0100)	A
> Bits Stored	(0028,0101)	A
> High Bit	(0028,0102)	A
> Pixel Representation	(0028,0103)	A
> Pixel Data	(7FE0,0010)	A

4.2.1.3.7   Request Storage Commitment

4.2.1.3.7.1   Description and Sequencing of Activity

The successful storage of a SOP Instance on a remote node can be verified by sending an N-Action request to a remote host. This option is configurable and will be initiated automatically after a successful C-Store operation.

4.2.1.3.7.2   Proposed Presentation Contexts

The *EMR Manager* software will propose Presentation Contexts as shown in the following table:

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended
Name	UID	Name List	UID List		Negotiat.
Storage Commitment Push Model	1.2.840.10008.1.20.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCU	none

4.2.1.3.7.3   SOP Specific Conformance Statement for SOP Class Storage Commitment Push Model

The *VEPRO EMR Manager* software sends the N-Action request and closes the association after receiving the N-ACTION response message.

The SCP of this service is required to transmit the N-Event-Report message by initiating a new association to the *VEPRO EMR Manager* software.

4.2.1.4   Association Acceptance Policy

The *Server Thread* accepts Associations from all AE's configured as a DICOM node in the configuration files. If the AE Title or the IP Address is not configured, the association will be rejected. A maximum PDU Length of 16384 Bytes is proposed.

4.2.1.4.1   Activity - Receive Echo

4.2.1.4.1.1   Description and Sequencing of Activities

After receiving a C-Echo request from a remote AE a C-Echo response is sent to the calling AE.

4.2.1.4.1.2 Accepted Presentation Contexts

The *EMR Manager* software will accept Presentation Contexts as shown in the following table:

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended**
Name	**UID**	**Name List**	**UID List**		**Negotiat.**
Verification	1.2.840.10008.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	none

4.2.1.4.1.3 Presentation Context Acceptance Criterion

There are no specific rules for acceptance of presentation contexts.

4.2.1.4.2 Activity - Receive Images or related Objects from a Remote Node

4.2.1.4.2.1 Description and Sequencing of Activities

The associated activity is a C-Store request received by the *Server Thread*. After accepting an association from a remote DICOM AE the *Server Thread* receives images, or other objects related to images, and stores them on the hard-disk.

4.2.1.4.2.2 Accepted Presentation Contexts

The *Server Thread* will accept Presentation Contexts as shown in the following table:

Presentation Context Table				
Abstract Syntax		**Transfer Syntax**	**Role**	**Extended**
Name	**UID**			**Negotiat.**
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1	See TRN table 2 below	SCP	none
Digital X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.1	See TRN table 2 below	SCP	none
Digital X-Ray Image Storage – For Processing	1.2.840.10008.5.1.4.1.1.1.1.1	See TRN table 2 below	SCP	none
Digital Mammography X-Ray Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.2	See TRN table 2 below	SCP	none
Digital Mammography X-Ray Image Storage - For Processing	1.2.840.10008.5.1.4.1.1.1.2.1	See TRN table 2 below	SCP	none
Digital Intra-Oral X-Ray Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.3	See TRN table 2 below	SCP	none
Digital Intra-Oral X-Ray Image Storage - For Processing	1.2.840.10008.5.1.4.1.1.1.3.1	See TRN table 2 below	SCP	none
CT Image Storage	1.2.840.10008.5.1.4.1.1.2	See TRN table 2 below	SCP	none
Enhanced CT Image Storage	1.2.840.10008.5.1.4.1.1.2.1	See TRN table 2 below	SCP	none
Ultrasound Multi-frame Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.3*	*See TRN table 3 below*	*SCP*	*none*
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1	See TRN table 3 below	SCP	none
MR Image Storage	1.2.840.10008.5.1.4.1.1.4	See TRN table 2 below	SCP	none
Enhanced MR Image Storage	1.2.840.10008.5.1.4.1.1.4.1	See TRN table 2 below	SCP	none
Nuclear Medicine Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.5*	*See TRN table 2 below*	*SCP*	*none*
Ultrasound Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.6*	*See TRN table 3 below*	*SCP*	*none*
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1	See TRN table 3 below	SCP	none
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7	See TRN table 2 below	SCP	none
Multi-frame Single Bit SC Image Storage	1.2.840.10008.5.1.4.1.1.7.1	See TRN table 1 below	SCP	none
Multi-frame Grayscale Byte SC Image Storage	1.2.840.10008.5.1.4.1.1.7.2	See TRN table 2 below	SCP	none
Multi-frame Grayscale Word SC Image Storage	1.2.840.10008.5.1.4.1.1.7.3	See TRN table 2 below	SCP	none
Multi-frame True Color SC Image Storage	1.2.840.10008.5.1.4.1.1.7.4	See TRN table 2 below	SCP	none
Standalone Curve Storage (Retired)	*1.2.840.10008.5.1.4.1.1.9*	*See TRN table 1 below*	*SCP*	*none*
12-lead ECG waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.1	See TRN table 1 below	SCP	none
General ECG Waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.2	See TRN table 1 below	SCP	none

Ambulatory ECG Waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.3	See TRN table 1 below	SCP	none
Hemodynamic Waveform Storage	1.2.840.10008.5.1.4.1.1.9.2.1	See TRN table 1 below	SCP	none
Cardiac Electrophysiology Waveform Storage	1.2.840.10008.5.1.4.1.1.9.3.1	See TRN table 1 below	SCP	none
Standalone VOI LUT Storage (Retired)	*1.2.840.10008.5.1.4.1.1.11*	*See TRN table 1 below*	*SCP*	*none*
Grayscale Softcopy Presentation State Storage	1.2.840.10008.5.1.4.1.1.11.1	See TRN table 1 below	SCP	none
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1	See TRN table 2 below	SCP	none
X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2	See TRN table 2 below	SCP	none
X-Ray Angiographic Bi-Plane Image Storage SOP Class (Retired)	*1.2.840.10008.5.1.4.1.1.12.3*	*See TRN table 2 below*	*SCP*	*none*
Breast Tomosynthesis Image Storage	1.2.840.10008.5.1.4.1.1.13.1.3	See TRN table 2 below	SCP	none
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20	See TRN table 2 below	SCP	none
VL Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.77.1*	*See TRN table 2 below*	*SCP*	*none*
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1	See TRN table 2 below	SCP	none
Video Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1.1	See TRN table 4 below	SCP	none
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2	See TRN table 2 below	SCP	none
Video Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2.1	See TRN table 4 below	SCP	none
VL Slice-coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3	See TRN table 2 below	SCP	none
VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4	See TRN table 2 below	SCP	none
Video Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4.1	See TRN table 4 below	SCP	none
VL Multi-frame Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.77.2*	*See TRN table 2 below*	*SCP*	*none*
Basic Text SR	1.2.840.10008.5.1.4.1.1.88.11	See TRN table 1 below	SCP	none
Enhanced SR	1.2.840.10008.5.1.4.1.1.88.22	See TRN table 1 below	SCP	none
Comprehensive SR	1.2.840.10008.5.1.4.1.1.88.33	See TRN table 1 below	SCP	none
Key Object Selection Document	1.2.840.10008.5.1.4.1.1.88.59	See TRN table 1 below	SCP	none
X-Ray Radiation Dose SR	1.2.840.10008.5.1.4.1.1.88.67	See TRN table 1 below	SCP	none
Encapsulated PDF Storage	1.2.840.10008.5.1.4.1.1.104.1	See TRN table 1 below	SCP	none
Encapsulated CDA Storage	1.2.840.10008.5.1.4.1.1.104.2	See TRN table 1 below	SCP	none
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128	See TRN table 2 below	SCP	none
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1	See TRN table 2 below	SCP	none
RT Dose Storage	1.2.840.10008.5.1.4.1.1.481.2	See TRN table 1 below	SCP	none
RT Structure Set Storage	1.2.840.10008.5.1.4.1.1.481.3	See TRN table 1 below	SCP	none
RT Beams Treatment Record Storage	1.2.840.10008.5.1.4.1.1.481.4	See TRN table 1 below	SCP	none
RT Plan Storage	1.2.840.10008.5.1.4.1.1.481.5	See TRN table 1 below	SCP	none
RT Brachy Treatment Storage	1.2.840.10008.5.1.4.1.1.481.6	See TRN table 1 below	SCP	none
RT Treatment Summary Record Storage	1.2.840.10008.5.1.4.1.1.481.7	See TRN table 1 below	SCP	none
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1	See TRN table 2 below	SCP	none
Digital X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.1	See TRN table 2 below	SCP	none

TRN table 1:

Transfer Syntax Table	
Name	**UID**
Implicit VR Little Endian	1.2.840.10008.1.2
Explicit VR Little Endian	1.2.840.10008.1.2.1
Explicit VR Big Endian	1.2.840.10008.1.2.2

TRN table 2:

Transfer Syntax Table	
Name	**UID**
Implicit VR Little Endian	1.2.840.10008.1.2
Explicit VR Little Endian	1.2.840.10008.1.2.1
Explicit VR Big Endian	1.2.840.10008.1.2.2
JPEG Baseline Lossy 8 Bit Image Compression	1.2.840.10008.1.2.4.50
JPEG Lossless Image Compression	1.2.840.10008.1.2.4.70
JPEG 2000 Lossless Image Compression	1.2.840.10008.1.2.4.90
JPEG 2000 Lossy Image Compression	1.2.840.10008.1.2.4.91

TRN table 3:

Transfer Syntax Table	
Name	**UID**
Implicit VR Little Endian	1.2.840.10008.1.2
Explicit VR Little Endian	1.2.840.10008.1.2.1
Explicit VR Big Endian	1.2.840.10008.1.2.2
JPEG Baseline Lossy 8 Bit Image Compression	1.2.840.10008.1.2.4.50
JPEG Lossless Image Compression	1.2.840.10008.1.2.4.70
JPEG 2000 Lossless Image Compression	1.2.840.10008.1.2.4.90
JPEG 2000 Lossy Image Compression	1.2.840.10008.1.2.4.91
RLE Lossless	1.2.840.10008.1.2.5

TRN table 4:

Transfer Syntax Table	
Name	**UID**
MPEG2 Main Profile Main Level	1.2.840.10008.1.2.4.100
MPEG2 Main Profile High Level	1.2.840.10008.1.2.4.101
MPEG-4 AVC/H.264 High Profile / Level 4.1	1.2.840.10008.1.2.4.102
MPEG-4 AVC/H.264 BD-compatible High Profile / Level 4.1	1.2.840.10008.1.2.4.103

4.2.1.4.2.3   Presentation Context Acceptance Criterion

Any number of SOP classes that are listed in table 3.1.2 above will be accepted by the *VEPRO EMR Manager* software, while there are enough resources on the local host.

4.2.1.4.2.4   Transfer Syntax Selection Policies

The *VEPRO EMR Manager* software currently supports the Implicit VR Little Endian, Explicit VR Little Endian and some Compressed transfer syntax for image SOP Instances. Any proposed presentation context which includes one of these transfer syntaxes will be accepted. Any proposed presentation context that does not include one of these transfer syntaxes will be rejected. If more than one of them are proposed in a presentation context, the *VEPRO EMR Manager* software uses the following order to select the preferred transfer syntax:

1.   Compressed transfer syntax
2.   Explicit VR Little Endian transfer syntax
3.   Implicit VR Little Endian transfer syntax

4.2.1.4.3   Activity - Search for DICOM Objects in Database

4.2.1.4.3.1   Description and Sequencing of Activities

The associated activity is a C-Find request received by the *Server Thread*. After receiving the C-Find request the *VEPRO EMR Manager* software performs a matching in the database and returns a list of all matching SOP instances in a C-Find response.

4.2.1.4.3.2   Accepted Presentation Contexts

The *Server Thread* will accept Presentation Contexts as shown in the following table:

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended**
Name	**UID**	**Name List**	**UID List**		**Negotiat.**
Patient Root Query/Retrieve Information Model – FIND	1.2.840.10008.5.1.4.1.2.1.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None

Study Root Query/Retrieve Information Model – FIND	1.2.840.10008.5.1.4.1.2.2.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	none

4.2.1.4.3.3 SOP Specific Conformance for the C-Find SOP Classes

The *VEPRO EMR Manager* software conforms as an SCP to the Query (C-Find) Service Class in accordance with the DICOM Standard.

Some of the Attributes returned through the C-Find operation may be modified by the user at the *VEPRO EMR Manager* software database and do no longer represent the original values in the stored SOP instance. Priority Processing is not supported.

The following Tables show the attributes supported by the *VEPRO EMR Manager* software C-Find operation. The values in the Matching column have the following meanings:

Matching Value	Meaning
U/M	Unique Key / Matching supported
M	Matching Supported
R	Key can be returned (no matching)

Patient Level Attributes for the Patient Root Query/Retrieve Information Model

Attribute	Tag	Matching
Patient's Name	(0010,0010)	M
Patient ID	(0010,0020)	U/M
Patient's Birth Date	(0010,0030)	R
Patient's Sex	(0010,0040)	M
Patient's Size	(0010,1020)	R
Patient's Weight	(0010,1030)	R

Study Level Attributes for the Patient Root Query/Retrieve Information Model

Attribute	Tag	Matching
Study Date	(0008,0020)	M
Study Time	(0008,0030)	M
Accession Number	(0008,0050)	M
Study ID	(0020,0010)	M
Study Instance UID	(0020,000D)	U/M
Referring Physician's Name	(0008,0090)	M
Modalities in Study	(0008,0061)	M
Study Description	(0008,1030)	R
Number of Study Related Series	(0020,1206)	R
Number of Study Related Instances	(0020,1208)	R

Series Level Attributes for the Patient Root Query/Retrieve Information Model

Attribute	Tag	Matching
Modality	(0008,0060)	M
Series Number	(0020,0011)	M
Series Instance UID	(0020,000E)	U/M
Number of Series Related Instances	(0020,1209)	R
Request Attribute Sequence	(0040,0275)	M
> Requested Procedure ID	(0040,1001)	M
> Scheduled Procedure Step ID	(0040,0009)	M
> Performed Procedure Step Start Date	(0040,0244)	M
> Performed Procedure Step Start Time	(0040,0245)	M

Composite Object Instance Level Attributes for the Patient Root Query/Retrieve Information Model

Attribute	Tag	Matching
Instance Number	(0020,0013)	M
SOP Instance UID	(0008,0018)	U/M
SOP Class UID	(0008,0016)	R
Rows	(0028,0010)	R
Columns	(0028,0011)	R
Bits Allocated	(0028,0100)	R
Number of Frames	(0028,0008)	R

Study Level Attributes for the Study Root Query/Retrieve Information Model

Attribute	Tag	Matching
Study Date	(0008,0020)	M
Study Time	(0008,0030)	M
Accession Number	(0008,0050)	M
Patient's Name	(0010,0010)	M
Patient ID	(0010,0020)	M
Study ID	(0020,0010)	M
Study Instance UID	(0020,000D)	U/M
Referring Physician's Name	(0008,0090)	M
Modalities in Study	0008,0061)	M
Study Description	(0008,1030)	R
Number of Study Related Series	(0020,1206)	R
Number of Study Related Instances	(0020,1208)	R
Patient's Birth Date	(0010,0030)	R
Patient's Sex	(0010,0040)	M
Patient's Size	(0010,1020)	R
Patient's Weight	(0010,1030)	R

Attributes for the Series Level and the Composite Object Instance Level of the Study Root Query/Retrieve Information Model are the same as the corresponding Attributes of the Patient Root Query/Retrieve Information Model.

Note : The Tables represent the Matching Attributes for the *VEPRO EMR Manager* software default Database configuration. Matching is only supported for Database Keys. If the user changes the Database configuration matching on some of the Attributes may not be supported.

4.2.1.4.3.4   Presentation Context Acceptance Criterion

There are no specific rules for acceptance of presentation contexts.

4.2.1.4.4   Activity - Retrieve DICOM Objects from the Database

4.2.1.4.4.1   Description and Sequencing of Activities

The associated activity is a C-Move request received by the *Server Thread*. After receiving the C-Move request the *VEPRO EMR Manager* software will send all requested SOP instances to the requested remote DICOM node.

4.2.1.4.4.2   Accepted Presentation Contexts

The *Server Thread* will accept Presentation Contexts as shown in the following table:

Presentation Context Table					
Abstract Syntax		Transfer Syntax		Role	Extended
Name	UID	Name List	UID List		Negotiat.
Patient Root Query/Retrieve Information Model – MOVE	1.2.840.10008.5.1.4.1.2.1.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	none
Study Root Query/Retrieve Information Model – MOVE	1.2.840.10008.5.1.4.1.2.2.2	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	none

4.2.1.4.4.3   Presentation Context Acceptance Criterion

There are no specific rules for acceptance of presentation contexts.

4.2.1.4.5 Activity - Commit Storage of Images in Database

4.2.1.4.5.1 Description and Sequencing of Activities

The associated activity is a N-ACTION request received by the *Server Thread*. After receiving the request the *VEPRO EMR Manager* software verifies that the requested SOP instances are stored in the database.

4.2.1.4.5.2 Accepted Presentation Contexts

The *Server Thread* will accept Presentation Contexts as shown in the following table:

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended**
Name	**UID**	**Name List**	**UID List**		**Negotiat.**
Storage Commitment Push Model	1.2.840.10008.1.20.1	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None

4.2.1.4.5.3 SOP Specific Conformance Statement for SOP Class Storage Commitment Push Model

The *VEPRO EMR Manager* software will close the association after the N-ACTION request has been received.

The *VEPRO EMR Manager* software opens a new association to transmit the N-EVENT-REPORT to the requesting remote AE.

4.2.1.4.5.4 Presentation Context Acceptance Criterion

There are no specific rules for acceptance of presentation contexts.

4.2.1.4.6 Activity - Receive and distribute MPPS Messages

4.2.1.4.6.1 Description and Sequencing of Activities

The *VEPRO EMR Manager* software is waiting for incoming N-CREATE or N-SET messages for a Modality Performed Procedure Step SOP instance. These messages can then be distributed to a configurable list of remote Application Entities.

4.2.1.4.6.2 Accepted Presentation Contexts

The *Server Thread* will accept Presentation Contexts as shown in the following table:

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended**
Name	**UID**	**Name List**	**UID List**		**Negotiat.**
Modality Performed Procedure Step	1.2.840.10008.3.1.2.3.3	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None

4.2.1.4.6.3 SOP Specific Conformance Statement for SOP Class Storage Commitment Push Model

VEPRO EMR Manager software provides standard conformance to this SOP class.

4.2.1.4.7 Activity - Provide Modality Worklist

4.2.1.4.7.1 Description and Sequencing of Activities

The *VEPRO EMR Manager* software can be configured to provide a Modality Worklist in place of a hospital information system (HIS/RIS) that has no DICOM Modality Worklist interface available.

The associated Real-World Activity is a C-FIND request issued by a remote Application Entity. As a result *VEPRO EMR Manager* software will perform a search in its worklist database and return matching SOP Instances in the C-FIND response.

4.2.1.4.7.2 Accepted Presentation Contexts

The *Server Thread* will accept Presentation Contexts as shown in the following table:

Presentation Context Table					
Abstract Syntax		**Transfer Syntax**		**Role**	**Extended Negotiat.**
Name	**UID**	**Name List**	**UID List**		
Modality Worklist Information Model - FIND	1.2.840.10008.5.1.4.31	Implicit VR Little Endian	1.2.840.10008.1.2	SCP	None

4.2.1.4.7.3 SOP Specific Conformance Statement for SOP Modality Worklist C-Find

VEPRO EMR Manager Software supports all required matching and return keys, supposed these elements are provided by the attached information system (HIS/RIS).

The following elements are supported for this SOP Class. The values in the Matching column have the following meanings :

Matching Value	Meaning
M	Matching Supported
R	Key can be returned (no matching)

Attribute	Tag	Matching
Specific Character Set	(0008,0005)	R
Scheduled Procedure Step Sequence	(0040,0100)	M
> Scheduled Station AE Title	(0040,0001)	M
> Scheduled Procedure Step Start Date	(0040,0002)	M
> Scheduled Procedure Step Start Time	(0040,0003)	M
> Modality	(0008,0060)	M
> Scheduled Performing Physician's Name	(0040,0006)	M
> Scheduled Procedure Step Description	(0040,0007)	R
> Scheduled Station Name	(0040,0010)	R
> Pre-Medication	(0040,0012)	R
> Scheduled Procedure Step ID	(0040,0009)	M
> Requested Contrast Agent	(0032,1070)	R
> Scheduled Procedure Step Status	(0040,0020)	R
Requested Procedure ID	(0040,1001)	R
Requested Procedure Description	(0032,1060)	R
Study Instance UID	(0020,000D)	R
Requested Procedure Priority	(0040,1003)	R
Accession Number	(0008,0050)	R
Requesting Physician	(0032,1032)	R
Referring Physician's Name	(0008,0090)	R
Admission ID	(0038,0010)	R
Current Patient Location	(0038,0300)	R
Referenced Patient Sequence	(0008,1120)	R
> Referenced SOP Class UID	(0008,1150)	R
> Referenced SOP Instance UID	(0008,1155)	R
Patient's Name	(0010,0010)	M
Patient ID	(0010,0020)	M
Patients Birth Date	(0010,0030)	M
Patient's Sex	(0010,0040)	M
Patient's Weight	(0010,1030)	R
Patient State	(0038,0500)	R
Pregnancy Status	(0010,21C0)	R
Medical Alerts	(0010,2000)	R
Contrast Allergies	(0010,2110)	R
Special Needs	(0038,0050)	R

4.3   Network Interfaces

4.3.1   Physical Network Interfaces

The *VEPRO EMR Manager* software provides DICOM V3.0 TCP/IP Network Communication Support as defined in PS 3.8 of the DICOM Standard.

The *VEPRO EMR Manager* software uses the standard TCP/IP stack from Microsoft Windows operating system from the computer system operating the software.

4.3.1.1   Physical Media Support

The *VEPRO EMR Manager* software is independent of the physical medium over which TCP/IP executes. This feature is inherent from the Microsoft Windows operating system.

4.4   Configuration

4.4.1   AE Title / Presentation Address Mapping

The AE Title of the *VEPRO EMR Manager* software is configurable and defaults to VTSERVER. The port on which the software listens is also configurable and defaults to 104. The software can also be configured to listen on multiple ports.

Each remote node that wants to make an association to the *VEPRO EMR Manager* software has to be configured with AE Title and IP Address. Request from unknown hosts are rejected.
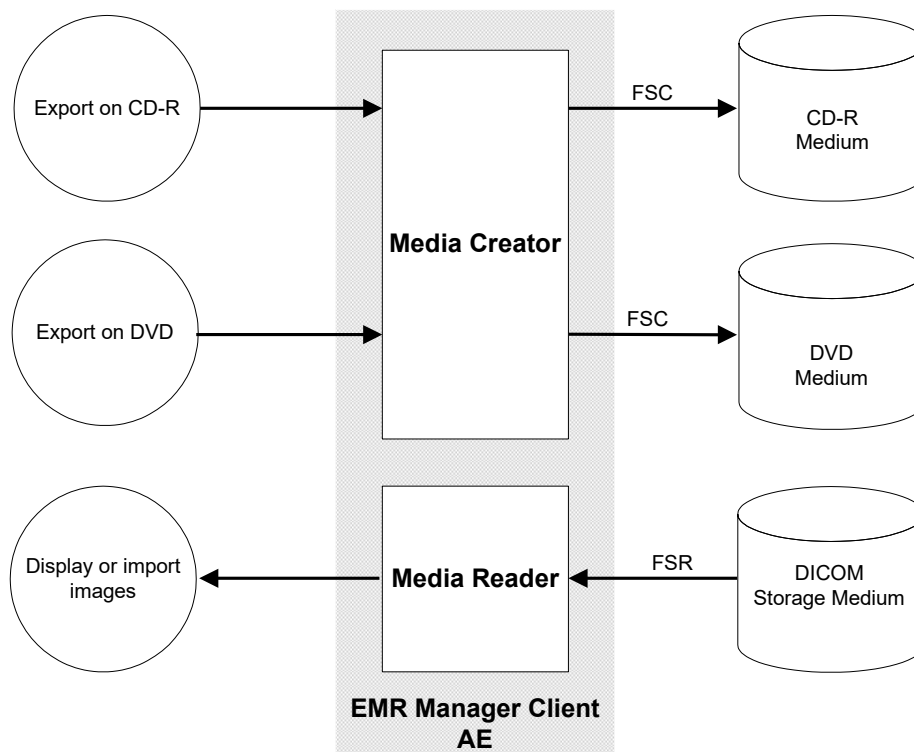
4.4.2   Configurable Parameters

* Local AE Title

* Local Listen Port(s)

* AE Title, IP Address and Port Number for each remote node

5 Media Interchange

5.1 Implementation Model

5.1.1 Application Data Flow

5.1.2 Functional Definition of AEs

The *VEPRO EMR Manager Client* AE consists of client components that handle Storage Medium export, import and display.

The *Media Creator* generates a DICOM File Set of various DICOM SOP instances and writes this File Set to 120mm Compact Disc Recordable (CD-R) or DVD (DVD-R, DVD+R) media according to the specified Application Profiles

The *Media Reader* reads a DICOM File Set from 120mm Compact Disc Recordable (CD-R) or DVD (DVD-R, DVD+R) media. The content can either be directly displayed or imported to the *VEPRO EMR Manager PACS* database.

5.1.3 File Meta Information for Implementation Class and Version

The *VEPRO EMR Manager* software provides the following Implementation Identifying Information:

- Implementation Class UID is set to "1.2.276.0.19.1996.1"

- Implementation Version Name is set to "VTServer 4.32"

5.2 AE Specifications

5.2.1 VEPRO EMR Manager Client AE Specification

The *VEPRO EMR Manager Client AE* provides standard conformance to the Media Storage Service Class. The Application Profiles and supported roles are listed in Table 5.1 below:

Table 5.1: Supported Application Profiles

Supported Application Profiles	Real World Activity	Roles	SC Option
STD-GEN-CD STD-GEN-DVD-JPEG AUG-STD-GEN-DVD-JPEG-ON-CDR	Export to Medium	FSC	Interchange
STD-GEN-CD STD-GEN-DVD-J2K STD-XABC-CD STD-XA1K-CD STD-CTMR-CD STD-CTMR-DVD	Load from Medium	FSR	Interchange
STD-GEN-CD STD-GEN-DVD-J2K STD-XABC-CD STD-XA1K-CD STD-CTMR-CD STD-CTMR-DVD	Import from Medium	FSR	Interchange

Table 5.2: SOP Classes supported for Media Interchange

SOP Class Name	SOP Class UID
Computed Radiography Image Storage	1.2.840.10008.5.1.4.1.1.1
Digital X-Ray Image Storage – For Presentation	1.2.840.10008.5.1.4.1.1.1.1
Digital X-Ray Image Storage – For Processing	1.2.840.10008.5.1.4.1.1.1.1.1
Digital Mammography X-Ray Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.2
Digital Mammography X-Ray Image Storage - For Processing	1.2.840.10008.5.1.4.1.1.1.2.1
Digital Intra-Oral X-Ray Image Storage - For Presentation	1.2.840.10008.5.1.4.1.1.1.3
Digital Intra-Oral X-Ray Image Storage - For Processing	1.2.840.10008.5.1.4.1.1.1.3.1
CT Image Storage	1.2.840.10008.5.1.4.1.1.2
Enhanced CT Image Storage	1.2.840.10008.5.1.4.1.1.2.1
Ultrasound Multi-frame Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.3*
Ultrasound Multi-frame Image Storage	1.2.840.10008.5.1.4.1.1.3.1
MR Image Storage	1.2.840.10008.5.1.4.1.1.4
Enhanced MR Image Storage	1.2.840.10008.5.1.4.1.1.4.1
Nuclear Medicine Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.5*
Ultrasound Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.6*
Ultrasound Image Storage	1.2.840.10008.5.1.4.1.1.6.1
Secondary Capture Image Storage	1.2.840.10008.5.1.4.1.1.7
Multi-frame Single Bit SC Image Storage	1.2.840.10008.5.1.4.1.1.7.1
Multi-frame Grayscale Byte SC Image Storage	1.2.840.10008.5.1.4.1.1.7.2
Multi-frame Grayscale Word SC Image Storage	1.2.840.10008.5.1.4.1.1.7.3
Multi-frame True Color SC Image Storage	1.2.840.10008.5.1.4.1.1.7.4
12-lead ECG waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.1
General ECG Waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.2
Ambulatory ECG Waveform Storage	1.2.840.10008.5.1.4.1.1.9.1.3
Hemodynamic Waveform Storage	1.2.840.10008.5.1.4.1.1.9.2.1
Cardiac Electrophysiology Waveform Storage	1.2.840.10008.5.1.4.1.1.9.3.1
Grayscale Softcopy Presentation State Storage	1.2.840.10008.5.1.4.1.1.11.1
X-Ray Angiographic Image Storage	1.2.840.10008.5.1.4.1.1.12.1
X-Ray Radiofluoroscopic Image Storage	1.2.840.10008.5.1.4.1.1.12.2
X-Ray Angiographic Bi-Plane Image Storage SOP Class (Retired)	*1.2.840.10008.5.1.4.1.1.12.3*
Breast Tomosynthesis Image Storage	1.2.840.10008.5.1.4.1.1.13.1.3
Nuclear Medicine Image Storage	1.2.840.10008.5.1.4.1.1.20
VL Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.77.1*
VL Endoscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.1
VL Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.2
VL Slice-coordinates Microscopic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.3

VL Photographic Image Storage	1.2.840.10008.5.1.4.1.1.77.1.4
VL Multi-frame Image Storage (Retired)	*1.2.840.10008.5.1.4.1.1.77.2*
Basic Text SR	1.2.840.10008.5.1.4.1.1.88.11
Enhanced SR	1.2.840.10008.5.1.4.1.1.88.22
Comprehensive SR	1.2.840.10008.5.1.4.1.1.88.33
Key Object Selection Document	1.2.840.10008.5.1.4.1.1.88.59
X-Ray Radiation Dose SR	1.2.840.10008.5.1.4.1.1.88.67
Encapsulated PDF Storage	1.2.840.10008.5.1.4.1.1.104.1
Encapsulated CDA Storage	1.2.840.10008.5.1.4.1.1.104.2
Positron Emission Tomography Image Storage	1.2.840.10008.5.1.4.1.1.128
RT Image Storage	1.2.840.10008.5.1.4.1.1.481.1

5.2.1.1 File Meta Information for the Application Entity

The Source Application Entity Title in the File META Header is usually the AE Title of the remote AE that did transfer and store the SOP Instances to the *MEDIMAGE PACS* archive.

5.2.1.2 Real World Activities

5.2.1.2.1 Activity – Export to Medium

The user selects SOP Instances from one or more Patients or Studies to a pickup list for export to storage media. The type of medium (CD-R or DVD) and the physical device used for creating the medium are selected from a list of configured and available device/media combinations.

5.2.1.2.1.1 Media Storage Application Profiles

The *MEDIMAGE Client AE* provides standard conformance to the Media Storage Application Profiles listed in Table 5.1 for this activity.

For the Application Profiles STD-GEN-CD, STD-GEN-DVD-JPEG and AUG-STD-GEN-DVD-JPEG-ON-CDR only the SOP Classes listed in table 5.2 are supported.

5.2.1.2.2 Activity – Load from Medium

After inserting a supported CD-R or DVD medium the user has to select this medium as input source. As a result the user is presented a list of studies representing the content of the media. From this list the user can select one or more Studies for display.

5.2.1.2.2.1 Media Storage Application Profiles

The *VEPRO EMR Manager Client AE* provides standard conformance to the Media Storage Application Profiles listed in Table 5.1 for this activity.

For the Application Profile STD-GEN-CD only the SOP Classes listed in table 5.2 are supported.

5.2.1.2.3 Activity – Import from Medium

After inserting a supported CD-R or DVD medium the user has to select the "Import from Medium" function and to select the destination archive for the import. As a result all SOP Instances listed in the Basic Directory of the medium are imported to the selected local or central archive.

5.2.1.2.3.1 Media Storage Application Profiles

The *VEPRO EMR Manager Client AE* provides standard conformance to the Media Storage Application Profiles listed in Table 5.1 for this activity.

For the Application Profile STD-GEN-CD only the SOP Classes listed in table 5.2 are supported.

5.3 Augmented and Private Apllication Profiles

5.3.1 Augmented Application Profiles

5.3.1.1 Augmented Application Profile AUG-STD-GEN-DVD-JPEG-ON-CDR

The Application Profile AUG-STD-GEN-DVD-JPEG-ON-CDR is an augmentation of the STD-GEN-DVD-JPEG Profile as defined in PS 3.11 Annex H of the DICOM Standard.

The Profile is augmented by the physical media this profile supports.

5.3.1.1.1 SOP Class Augmentations

For this Application Profile the SOP Classes listed in Table 5.2 are supported.

5.3.1.1.2 Directory Augmentations

None.

5.3.1.1.3 Other Augmentations

The STD-GEN-DVD-JPEG profile is augmented by support for 120mm CD-R Medium as defined in PS 3.12 Annex F of the DICOM Standard.

5.3.2 Private Application Profiles

No Private Application Profiles are supported.

6 Support of Character Sets

The *VEPRO EMR Manager* software supports the default (ISO-IR 6) character set and the ISO 8859 Latin 1 (ISO-IR 100) character set.