DICOM Change Proposal

STATUS	NEW
Date of Last Update	2025-03-24
Person Assigned	Björn Nolte
Submitter Name	Ingo.Wilkening@siemens-healthineers.com
Submission Date	2024-11-29

Change Number	CP-2491
Log Summary: **Clarification of inconsistent values of Pixel Presentation (0008,9205)**	
Name of Standard PS3.3, PS3.4	

Rationale for Change:

In PS3.4, section "B.5.1.19 Planar MPR Volumetric Presentation State Storage SOP Classes",
there is:

> The Compositing Planar MPR Volumetric Presentation State Storage SOP Class shall use the Planar MPR Volumetric Presentation State IOD with an Enumerated Value of TRUE COLOR for Pixel Presentation (0008,9205).

Namely "TRUE COLOR" (with space between).

While in PS 3.3, section "C.11.27 MPR Volumetric Presentation State Display Module" there is:

Attribute Name	Tag	Type	Attribute Description

Pixel Presentation	(0008,9205)	1	Grayscale or color space of the Presentation State output.
			
			Enumerated Values:
			
			MONOCHROME
			
			    Output consists of P-Values
			
			TRUE_COLOR
			
			    Output consists of PCS-Values

Presentation State Classification Component Sequence	(0070,1801)	2C	Sequence of classification components in which the order of Items is significant. Each classification component converts one or two processed inputs into a single RGB output. One or more Items shall be included in this Sequence. See Section C.11.27.2. Required if Pixel Presentation (0008,9205) has a value of TRUE_COLOR.

Namely twice "TRUE_COLOR" (with underscore between).

This should be consistently changed to have "TRUE_COLOR" in PS3.4.
The Value in PS3.3 shall be kept, as modules are expected to be used by implementers.

Change Wording:

B.5.1.19 Planar MPR Volumetric Presentation State Storage SOP Classes

The requirements of Section FF.2.1.1 apply to the following SOP Classes:

- Grayscale Planar MPR Volumetric Presentation State Storage
- Compositing Planar MPR Volumetric Presentation State Storage

The Grayscale Planar MPR Volumetric Presentation State Storage SOP Class shall use the Planar MPR Volumetric Presentation State IOD with an Enumerated Value of MONOCHROME for Pixel Presentation (0008,9205) and shall have only a single item in the Volumetric Presentation State Input Sequence (0070,1201).

The Compositing Planar MPR Volumetric Presentation State Storage SOP Class shall use the Planar MPR Volumetric Presentation State IOD with an Enumerated Value of TRUE_COLOR for Pixel Presentation (0008,9205).

C.11.27 MPR Volumetric Presentation State Display Module

Table C.11.27-1 specifies the Attributes of the MPR Volumetric Presentation State Display Module, which define the transformations of the processed MPR Volumetric Presentation State inputs into a single VPS display space, as described in the Volumetric Presentation State pipeline in Section FF.2.1 "Volumetric Transformations" in PS3.4.

Table C.11.27-1. MPR Volumetric Presentation State Display Module Attributes

Attribute Name	Tag	Type	Attribute Description
Pixel Presentation	(0008,9205)	1	Grayscale or color space of the Presentation State output.
			Enumerated Values:
			MONOCHROME
			Output consists of P-Values
			TRUE_COLOR
			Output consists of PCS-Values

Attribute Name	Tag	Type	Attribute Description
Presentation State Classification Component Sequence	(0070,1801)	2C	Sequence of classification components in which the order of Items is significant. Each classification component converts one or two processed inputs into a single RGB output.
			One or more Items shall be included in this Sequence.
			See Section C.11.27.2.
			Required if Pixel Presentation (0008,9205) has a value of <mark>TRUE_COLOR</mark>.

[…]

30