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## DICOM Correction Item

Correction Number		CP-392
Log Summary: Add Frame Pointers Module to Multi-Frame US IOD		
Type of Modification	Name of Standard	
Correct Value	PS 3.3, 3.6 2003	
Rationale for Correction:  In a multi-frame US IOD, there is no way to specify significant frames such as contrast flash events. This CP proposes to: <ul style="list-style-type: none"><li>• extend the Frame Pointers Module with a new type 3 attribute with defined terms</li><li>• create defined terms for immediate frame identification needs</li><li>• add the Frame Pointers Module as an optional module for the ultrasound multi-frame SOP</li></ul>		
Sections of documents affected  PS 3.3 A.7.4, C.7.6.9		
Correction Wording:		

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**Add Frame Pointers Module to US MULTI-FRAME IMAGE IOD**

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Table A.1-1

**COMPOSITE INFORMATION OBJECT MODULES OVERVIEW - IMAGES**

IODs Modules	CR	CT	MR	Enh MR	NM	US	US MF	SC	SC MF SB	SC MF GB	SC MF GW	SC MF TC	XA	RF	RT IM	PET	DX	MG	IO	VL EN	VL MC	VL SL	VL PH	
...																								
Frame Pointers							<u>U</u>		U	U	U	U	U	U										
...																								

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**Add Frame Pointers Module to US MULTI-FRAME IMAGE IOD**

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**A.7.4 US Multi-Frame Image IOD Module Table**

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Table A.7-1

**US MULTI-FRAME IMAGE IOD MODULES**

IE	Module	Reference	Usage
...	...	...	...
Image	...		
	Multi-frame	C.7.6.6	M
	<b>Frame Pointers</b>	<b><u>C.7.6.9</u></b>	<b><u>U</u></b>
	Palette Color Lookup Table	C.7.9	C - Required if Photometric Interpretation (0028,0004) has a value of PALETTE COLOR
...	...	...	...

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**Extend Frame Pointers Module**

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**C.7.6.9 Frame Pointers Module**

Table C.7-15 specifies the attributes of a Frame Pointer Module.

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Table C.7-15

**FRAME POINTERS MODULE ATTRIBUTES**

Attribute Name	Tag	Type	Attribute Description
Representative Frame Number	(0028,6010)	3	The frame number selected for use as a pictorial representation (e.g. icon) of the Multi-frame Image
Frame Numbers Of Interest (FOI)	(0028,6020)	3	Frame number(s) selected as frames of interest. <b>A frame number may appear more than once.</b>
Frame Of Interest Description	(0028,6022)	3	Description of each one of the Frame(s) of Interest selected in (0028,6020). If multiple Frames of Interest are selected and this Attribute is used, it shall contain the same number of values as are in Frame Numbers of Interest (0028,6020).

<b>Frame of Interest Type</b>	<b>(0028,6023)</b>	<b>3</b>	<p><b><u>A defined term for each one of the Frame(s) of Interest (0028,6020) that identifies the significance of the frame. If multiple Frames of Interest are selected and this Attribute is used, it shall contain the same number of values as are in Frame Numbers of Interest (0028,6020).</u></b></p> <p><b><u>Defined Terms are:</u></b></p> <p><b><u>HIGHMI = a frame acquired at the time of the high power pulse that destroys acoustic contrast</u></b></p> <p><b><u>RWAVE = the frame closest to the R-Wave</u></b></p> <p><b><u>TRIGGER = a trigger frame, for example a set delay from the R Wave</u></b></p> <p><b><u>ENDSYSTOLE = the frame closest to end of systole, at the end of the T-wave</u></b></p>
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- 2 Notes: 1. Frame numbers begin at 1.  
 2. Frame of Interest Description is intended to indicate such frames as Systolic, Diastolic,  
 4 Stenotic Artery, **or trigger label**.

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**Add attribute to Part 6**

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<b>Tag</b>	<b>Name</b>	<b>VR</b>	<b>VM</b>
....			
<b>(0028,6023)</b>	<b>Frame of Interest Type</b>	<b>CS</b>	<b>1-n</b>