1	Status	Letter Ballot
2	Date of Last Update	2026/01/28
3	Person Assigned	David Clunie
4		mailto:dclunie@dclunie.com
5	Submitter Name	Andrew Chaffer
6		mailto:andy.chaffer1@gmail.com
7	Submission Date	2025/01/14

8	Correction Number CP-2506
9	Log Summary: Length limit of Detector ID
10	Name of Standard
11	PS3.3, PS3.6
12	Rationale for Correction:
13 14	Detector ID (0018,700A) gives a unique serial number for each detector. This is useful as it allows the detector a clinical image has been taken on to be uniquely identified which can be very useful if there are issues such as artefacts.
15	Detector ID (0018,700A) is a short string, which is 16 characters in length, and is too short for the serial numbers of some detectors.
16	For some use cases (such as multi-energy CT) the problem has been solved by the UC VR X-Ray Detector ID (0018,9371).
17	Propagate the use of the longer attribute to all uses of the shorter attribute, allowing for mandatory uses of the shorter attribute.
18 19	Note that identification of the detector is distinct from identification of the entire equipment/device (so Device Serial Number (0018,1000), an LO VR data element, is not applicable).
20	Correction Wording:

1   *Amend DICOM PS3.3 as follows (changes to existing text are bold and __underlined__ for additions and ~~struckthrough~~ for removals):*

C.8.11.4 DX Detector Module

Table C.8-71b. Digital X-Ray Detector Macro Attributes

Attribute Name	Tag	Type	Attribute Description
...			
Detector ID	(0018,700A)	3	The ID or serial number of the detector used to acquire this image. **Note** __Due to the length limit imposed by the VR of this Attribute, a full length serial number may need to be truncated. If truncated, the remaining string value should be as unique as possible within the local (site) context of use, and hence perhaps be the tail rather than the head of the string being truncated. The full length value can be encoded in X-Ray Detector ID (0018,9371).__
__X-Ray Detector ID__	__(0018,9371)__	__3__	__Identifier of the physical X-Ray detector. This might be the serial number.__ **Note** __If the value in Detector ID (0018,70)A) is truncated due to VR length limitations, this Attribute may be used to convey the full length value.__
Date of Last Detector Calibration	(0018,700C)	3	The date on which the detector used to acquire this image ~~as identified in Detector ID (0018,700A)~~ was last calibrated.
Time of Last Detector Calibration	(0018,700E)	3	The time at which the detector used to acquire this image ~~as identified in Detector ID (0018,700A)~~ was last calibrated.
Exposures on Detector Since Last Calibration	(0018,7010)	3	Total number of X-Ray exposures that have been made on the detector used to acquire this image ~~as identified in Detector ID (0018,700A)~~ since it was calibrated.
Exposures on Detector Since Manufactured	(0018,7011)	3	Total number of X-Ray exposures that have been made on the detector used to acquire this image ~~as identified in Detector ID (0018,700A)~~ since it was manufactured.
...			

C.8.21.2.3 Breast Tomosynthesis Contributing Sources Module

Table C.8.21.2.3-1. Breast Tomosynthesis Contributing Sources Module Attributes

Attribute Name	Tag	Type	Attribute Description
Contributing Sources Sequence	(0018,9506)	1	A Sequence that describes characteristics of the sources that are used to create a derived SOP Instance. One or more Items shall be included in this Sequence.
...			

Attribute Name	Tag	Type	Attribute Description
>Detector ID	(0018,700A)	1	The ID or serial number of the detector used to acquire this image. **Note** **<u>Due to the length limit imposed by the VR of this Attribute, a full length serial number may need to be truncated. If truncated, the remaining string value should be as unique as possible within the local (site) context of use, and hence perhaps be the tail rather than the head of the truncated string. The full length value can be encoded in X-Ray Detector ID (0018,9371).</u>**
<u>>X-Ray Detector ID</u>	**<u>(0018,9371)</u>**	**<u>3</u>**	**<u>Identifier of the physical X-Ray detector. This might be the serial number.</u>** **Note** **<u>If the value in Detector ID (0018,70)A) is truncated due to VR length limitations, this Attribute may be used to convey the full length value.</u>**
>Date of Last Detector Calibration	(0018,700C)	1	The date on which the detector used to acquire this image ~~as identified in Detector ID (0018,700A)~~ was last calibrated.
>Time of Last Detector Calibration	(0018,700E)	1	The time at which the detector used to acquire this image ~~as identified in Detector ID (0018,700A)~~ was last calibrated.
...			

For reference unchanged DICOM PS3.3:

C.8.2.2.2 Multi-energy CT X-Ray Detector Macro

Table C.8.2.2-3. Multi-energy CT X-Ray Detector Macro Attributes

Attribute Name	Tag	Type	Attribute Description
Multi-energy CT X-Ray Detector Sequence	(0018,936F)	1	...
...			
>X-Ray Detector ID	(0018,9371)	1	Identifier of the physical X-Ray detector. This might be the serial number. When a single detector discriminates different energies, the X-Ray Detector ID (0018,9371) will have the same value in different Items of Multi-energy CT X-Ray Detector Sequence (0018,936F).
...			

For reference unchanged DICOM PS3.6:

6 Registry of DICOM Data Elements

Table 6-1. Registry of DICOM Data Elements

Tag	Name	Keyword	VR	VM	
(0018,700A)	Detector ID	DetectorID	SH	1	
(0018,9371)	X-Ray Detector ID	XRayDetectorID	UC	1	