

DICOM Correction Proposal Form

Tracking Information - Administration Use Only	
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Submission Date	2015/04/01

Correction Number	CP-1492
Log Summary: Alternative Calender and Archeological Patient	
Name of Standard PS3.3, PS3.5, PS3.6 2016a	
Rationale for Correction <p>DICOM capable equipment is increasingly being used on patients that were born before the Gregorian Calendar was available or in locations where use of another calendar is important. Use of proleptic Gregorian dates can be problematic and should be identified as such.</p> <p>It is sometimes better that the patient demographics be maintained in the appropriate calendar system for these dates. This does not replace use of the Gregorian system. It is in addition to the Gregorian dates.</p> <p>Dates other than patient birth and death date, such as date of study, are less likely to need this treatment. After all, digital imaging was invented well after the widespread adoption of the Gregorian system. Even in those countries where the Gregorian system is not in use, there are well established reliable conversions between the Gregorian and the local calendar system. The user interface of the imaging system can manage these conversions accurately.</p> <p>An alternative death date is added to deal with archeological patients. These patients often have a date of death assigned, but no date of birth. This date may be just an estimate giving the year or approximate year.</p> <p>Three attributes are added:</p> <ul style="list-style-type: none">• Date of birth in alternative form,• Date of death in alternative form• Name of the calendar used, e.g., "Egyption Regnal" <p>These are all LO with no specified format because the different calendar systems use different notations. All can be represented as strings, but there is no other consistently recognized format.</p> <p>Other elements of the Patient Module such as Responsible Person (0010,2297) and Responsible Organization (0010,2299) appear to be adequate for other management of the archeological patient.</p>	
Correction Wording:	

Modify PS 3.3 Table C.2-3

Table C.2-3. Patient Demographic Module Attributes

Attribute Name	Tag	Attribute Description
...
Patient's Birth Date	(0010,0030)	Date of birth of the named patient
<u>Patient's Birth Date in Alternative Calendar</u>	(0010,0033)	<u>Date of birth of the named patient in the Alternative Calendar (0010,0035).</u> <u>Note: No format is specified for alternative calendar dates so none should be assumed.</u>
<u>Patient's Death Date in Alternative Calendar</u>	(0010,0034)	<u>Date of death of the named patient in the Alternative Calendar (0010,0035).</u> <u>Note: No format is specified for alternative calendar dates so none should be assumed.</u>
<u>Patient's Alternative Calendar</u>	(0010,0035)	<u>The Alternative Calendar used for Patient's Birth Date in Alternative Calendar (0010,0033) and Patient's Death Date in Alternative Calendar (0010,0034).</u> <u>See C.7.1.1.1.5 for Defined Terms.</u> <u>Required if either Patient's Birth Date in Alternative Calendar (0010,0033) or Patient's Alternative Death Date in Calendar (0010,0034) is present.</u>

Modify PS 3.3 Table C.4-13:

Table C.4-13. Performed Procedure Step Relationship Module Attributes

Attribute Name	Tag	Attribute Description
...
Patient's Birth Date	(0010,0030)	Date of birth of the named patient
<u>Patient's Birth Date in Alternative Calendar</u>	(0010,0033)	<u>Date of birth of the named patient in the Alternative Calendar (0010,0035).</u> <u>Note: No format is specified for alternative</u>

Attribute Name	Tag	Attribute Description
		<u>calendar dates so none should be assumed.</u>
<u>Patient's Death Date in Alternative Calendar</u>	(0010,0034)	<u>Date of death of the named patient in the Alternative Calendar (0010,0035).</u> <u>Note: No format is specified for alternative calendar dates so none should be assumed.</u>
<u>Patient's Alternative Calendar</u>	(0010,0035)	<u>The Alternative Calendar used for Patient's Birth Date in Alternative Calendar (0010,0033) and Patient's Death Date in Alternative Calendar (0010,0034).</u> <u>See C.7.1.1.1.5 for Defined Terms.</u> <u>Required if either Patient's Birth Date in Alternative Calendar (0010,0033) or Patient's Alternative Death Date in Calendar (0010,0034) is present.</u>

Modify PS 3.3 Table C.30.4-1:

Table C.30.4-1. Unified Procedure Step Relationship Module Attributes

Attribute Name	Tag	Attribute Description
...
Patient's Birth Date	(0010,0030)	Date of birth of the named patient
<u>Patient's Birth Date in Alternative Calendar</u>	(0010,0033)	<u>Date of birth of the named patient in the Alternative Calendar (0010,0035).</u> <u>Note: No format is specified for alternative calendar dates so none should be assumed.</u>
<u>Patient's Death Date in Alternative Calendar</u>	(0010,0034)	<u>Date of birth of the named patient in the Alternative Calendar (0010,0035).</u> <u>Note: No format is specified for alternative calendar dates so none should be assumed.</u>
<u>Patient's Alternative Calendar</u>	(0010,0035)	<u>The Alternative Calendar used for Patient's Birth Date in Alternative Calendar (0010,0033)</u>

Attribute Name	Tag	Attribute Description
		<p>and Patient's Death Date in Alternative Calendar (0010,0034). See C.7.1.1.1.5 for Defined Terms.</p> <p>Required if either Patient's Birth Date in Alternative Calendar (0010,0033) or Patient's Alternative Death Date in Calendar (0010,0034) is present.</p>

Modify PS 3.3 Table C.7-1

Table C.7-1. Patient Module Attributes

Attribute Name	Tag	Type	Attribute Description
...			
Patient's Birth Date	(0010,0030)	2	Birth date of the patient.
<u>Patient's Birth Date in Alternative Calendar</u>	(0010,0033)	3	<p><u>Date of birth of the named patient in the Alternative Calendar (0010,0035).</u></p> <p><u>Note: No format is specified for alternative calendar dates so none should be assumed.</u></p>
<u>Patient's Death Date in Alternative Calendar</u>	(0010,0034)	3	<p><u>Date of death of the named patient in the Alternative Calendar (0010,0035).</u></p> <p><u>Note: No format is specified for alternative calendar dates so none should be assumed.</u></p>
<u>Patient's Alternative Calendar</u>	(0010,0035)	1C	<p><u>The Alternative Calendar used for Patient's Birth Date in Alternative Calendar (0010,0033) and Patient's Death Date in Alternative Calendar (0010,0034).</u></p> <p><u>See C.7.1.1.1.5 for Defined Terms.</u></p> <p><u>Required if either Patient's Birth Date in Alternative Calendar (0010,0033) or Patient's Alternative Death Date in Calendar (0010,0034) is present.</u></p>

C.7.1.1.1.5 Patient's Alternative Calendar

Defined Terms:

_____ **PROLEPTIC GREGN**

_____ **JULIAN**

- PROLEPTIC JULIAN
- EGYPTIAN REGNAL
- HEBREW
- HIJRI

Modify PS 3.5 Table C.7-1

Table 6.2-1. DICOM Value Representations

VR Name	Definition	Character Repertoire	Length of Value
DA Date	<p>A string of characters of the format YYYYMMDD; where YYYY shall contain year, MM shall contain the month, and DD shall contain the day, interpreted as a date of the Gregorian calendar system.</p> <p>Example: "19930822" would represent August 22, 1993.</p> <p>Note</p> <p>1. The ACR-NEMA Standard 300 (predecessor to DICOM) supported a string of characters of the format YYYY.MM.DD for this VR. Use of this format is not compliant.</p> <p>2. See also DT VR in this table.</p> <p><u>3. Dates before year 1582, e.g. used for dating historical or archeological items, are interpreted as proleptic Gregorian calendar dates, unless otherwise specified.</u></p>	<p>"0"-"9" of Default Character Repertoire</p> <p>In the context of a Query with range matching (see PS3.4), the character "-" is allowed, and a trailing SPACE character is allowed for padding.</p>	<p>8 bytes fixed</p> <p>In the context of a Query with range matching (see PS3.4), the length is 18 bytes maximum.</p>

Modify PS 3.6 Table 6-1

Table 6-1. Registry of DICOM Data Elements

Tag	Name	Keyword	VR	VM	
(0010,0033)	Patient's Birth Date in Alternative Calendar	PatientBirthDateInAlternativeCalendar	LO	1	
(0010,0034)	Patient's Death Date in Alternative Calendar	PatientDeathDateInAlternativeCalendar	LO	1	
(0010,0035)	Patient's Alternative Calendar	PatientAlternativeCalendar	CS	1	