Status	Assigned
Date of Last Update	2019/02/23
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Submission Date	2019/02/14

Correction Number CP-1892
Log Summary: Correct code meanings for body surface area codes.
Name of Standard PS3.16
Rationale for Correction: The code meanings contain spurious spaces, inconsistent use of multiplier symbol (*, sometimes elided), and in some cases are inconsistent with their definitions.
Correction Wording:

*Amend DICOM PS3.16 as follows (changes to existing text are bold and **underlined** for additions and ~~**struckthrough**~~ for removals):*

CID 3663 Body Surface Area Equations

Resources: **HTML | FHIR JSON | FHIR XML | IHE SVS XML**
Type: **Extensible**
Version: **20100609**
UID: **1.2.840.10008.6.1.180**

Table CID 3663. Body Surface Area Equations

Coding Scheme Designator	Code Value	Code Meaning
DCM	122240	BSA = 0.003207*WT^(0.7285-0.0188-*log-(WT))-*HT^0.3
DCM	122241	BSA = 0.007184*WT^-0.425*HT^0.725
DCM	122242	BSA = 0.0235*WT^0.51456*HTcm^-0.42246
DCM	122243	BSA = 0.024265*WT^0.5378*HTcm^0.3964
DCM	122244	BSA = (HT-*-WT/36)-^0.5
DCM	122245	BSA = 1321+0.3433*WT
DCM	122246	BSA = 0.0004688*WT^(0.8168-0.0154*log(WT))
DCM	122266	BSA = 0.007358*WT^-0.425*HT^0.725
DCM	122267	BSA = 0.010265*WT^-0.423*HT^0.651
DCM	122268	BSA = 0.008883*WT^-0.444*HT^0.663
DCM	122269	BSA = 0.038189*WT^-0.423*HT^0.362
DCM	122270	BSA = 0.009568*WT^-0.473*HT^0.655

D DICOM Controlled Terminology Definitions (Normative)

This Annex specifies the meanings of codes defined in DICOM, either explicitly or by reference to another part of DICOM or an external reference document or standard.

The contents of this table are available in OWL format at ftp://medical.nema.org/medical/dicom/resources/ontology/dcm/dcm.owl and in Bioportal.

Table D-1. DICOM Controlled Terminology Definitions (Coding Scheme Designator "DCM" Coding Scheme Version "01")

Code Value	Code Meaning	Definition	Notes
122240	BSA = **0.00**3-207*WT^(0.7285-0.0188 *log-(WT))-*HT^0.3	Body Surface Area computed from patient height and weight: BSA = **0.00**3-207*WT[g]^(0.7285-0.0188-*log-(WT[g]))-*HT[cm]-^-0.3 [Boyd E, The growth of the surface area of the human body. Minneapolis: University of Minnesota Press, 1935, eq. (36)].	
122241	BSA = 0.007184*WT^ 0.425*HT^0.725	Body Surface Area computed from patient height and weight: BSA = 0.007184*-WT[kg]-^-0.425*HT[cm]-^-0.725 [Dubois and Dubois, Arch Int Med 1916 17:863-71].	
122242	BSA = 0.0235*WT^0.51456*HT^ 0.42246	Body Surface Area computed from patient height and weight: BSA = 0.0235*-WT[kg]-^0.51456*HT[cm]^-0.42246 [Gehan EA, George SL, 'Estimation of human body surface area from height and weight', Cancer Chemother Rep 1970 54:225-35].	

Code Value	Code Meaning	Definition	Notes
122243	BSA = 0.024265*WT^0.5378*HT^0.3964	Body Surface Area computed from patient height and weight: BSA = 0.024265-*-WT[kg]-^-0.5378-*-HT[cm]-^-0.3964 [Haycock G.B., Schwartz G.J., Wisotsky D.H. 'Geometric method for measuring body surface area: A height weight formula validated in infants, children and adults.' The Journal of Pediatrics 1978 93:1:62-66].	
122244	BSA = (HT-*-WT/36)-^0.5	Body Surface Area computed from patient height and weight: BSA = (HT[m] *-WT[kg] / 36)-^-0.5 [Mosteller, R.D. 'Simplified Calculation of Body Surface Area.' N Engl J Med 1987 Oct 22;317(17):1098].	
122245	BSA = 1321+0.3433*WT	Body Surface Area computed from patient weight:BSA = 1321 + 0.3433 *-WT[kg] (for pediatrics 3-30 kg) [Current, J.D. 'A Linear Equation For Estimating The Body Surface Area In Infants And Children', *The Internet Journal of Anesthesiology*. 1998. 2:2].	
122246	BSA = 0.0004688-*-WT-^-(0.8168--0.0154-*-log(WT))	BSA = 0.0004688-*-(1000-*-WT)-^-(0.8168-–0.0154-*-log(1000-*-WT)) Where (WT is weight in kilogram) Units = m2 Boyd, Edith. *The Growth of the Surface Area of the Human Body*(originally published in 1935 by the University of Minnesota Press), Greenwood Press, Westport, Connecticut, 1975, p. 102.Equation (35).	
122266	BSA = 0.007358-*-WT-^-0.425-*HT-^-0.725	Body Surface Area computed from patient height and weight: BSA = 0.007358-*-WT[kg]-^-0.425-*-HT[cm]-^-0.725 (for East Asian adult, aged 15+ years) [Kanai Izumi, Masamitsu Kanai, 'Clinical examination method summary'].	
122267	BSA = 0.010265-*-WT-^-0.423-*HT-^-0.651	Body Surface Area computed from patient height and weight: BSA = 0.010265-*-WT[kg]-^-0.423-*-HT[cm]-^-0.651 (For East Asian child aged 12-14 years).	
122268	BSA = 0.008883-*-WT-^-0.444-*HT-^-0.663	Body Surface Area computed from patient height and weight: BSA = 0.008883*-WT[kg]-^-0.444-*-HT[cm]-^-0.663 (For East Asian child aged 6-11 years).	
122269	BSA = 0.038189-*-WT-^-0.423-*HT-^-0.362	Body Surface Area computed from patient height and weight: BSA = 0.038189-*-WT[kg]-^-0.423-*-HT[cm]-^-0.362 (For East Asian child aged 1-5 years).	
122270	BSA = 0.009568-*-WT-^-0.473-*HT-^-0.655	Body Surface Area computed from patient height and weight: BSA = 0.009568*-WT[kg]-^-0.473-*-HT[cm]-^-0.655 (For East Asian child aged 0-12 months).	