

## **Digital Imaging and Communications in Medicine (DICOM)**

*Supplement xxx: Neurophysiology Waveforms*

*Prepared by: Working Group 32*

**DICOM Standards Committee, Working Group 6**

1300 N. 17th Street, Suite 900

Rosslyn, Virginia 22209 USA

Status: Version 0, Apr 14, 2019

Developed pursuant to DICOM Work Item yyyy-nn-X



## Table of Contents

Document History .....	5
Open Issues.....	5
Closed Issues .....	5
TODOs.....	6
Scope and Field of Application .....	7
Changes to NEMA Standards Publications PS 3.2 Digital Imaging and Communications in Medicine (DICOM) Part 2: Conformance .....	9
Changes to NEMA Standards Publications PS 3.3 Digital Imaging and Communications in Medicine (DICOM) Part 3: Information Object Definitions .....	9
A.34.11 Routine Scalp Electroencephalogram IOD.....	10
A.34.11.1 Routine Scalp EEG IOD Description.....	10
A.34.11.2 Routine Scalp EEG IOD Entity-Relationship Model.....	10
A34.11.3 Routine Scalp EEG IOD Module Table .....	10
A.34.11.4 Routine Scalp EEG IOD Constraints .....	11
A.34.11.4.1 Modality .....	11
A.34.11.4.2 Waveform Sequence .....	11
A.34.11.4.3 Number of Waveform Channels .....	11
A.34.11.4.4 Sampling Frequency .....	11
A.34.11.4.5 Channel Source and Channel Source Modifier.....	11
A.34.11.4.6 Waveform Sample Interpretation .....	11
A.34.11.4.7 Waveform Annotation Module .....	11
A.34.12 Intracranial EEG-Video-Monitoring IOD .....	11
A.34.12.1 Intracranial EEG-Video-Monitoring IOD Description.....	11
A.34.12.2 Intracranial EEG-Video-Monitoring EEG IOD Entity-Relationship Model.....	12
A34.12.3 Intracranial EEG-Video-Monitoring EEG IOD Module Table .....	12
A.34.12.4 Intracranial EEG-Video-Monitoring EEG IOD Constraints .....	12
A.34.12.4.1 Modality .....	12
A.34.12.4.2 Waveform Sequence .....	12
A.34.12.4.3 Number of Waveform Channels .....	12
A.34.12.4.4 Sampling Frequency .....	12
A.34.12.4.5 Channel Source and Channel Source Modifier.....	12
A.34.12.4.6 Waveform Sample Interpretation .....	13
A.34.12.4.7 Waveform Annotation Module .....	13
A.34.13 High-density Electroencephalogram IOD .....	13
A.34.13.1 High-density EEG IOD Description .....	13
A.34.13.2 High-density EEG IOD Entity-Relationship Model .....	13
A34.13.3 High-density EEG IOD Module Table .....	13
A.34.13.4 High-density EEG IOD Constraints .....	14
A.34.13.4.1 Modality .....	14
A.34.13.4.2 Waveform Sequence .....	14
A.34.13.4.3 Number of Waveform Channels .....	14
A.34.13.4.4 Sampling Frequency .....	14
A.34.13.4.5 Channel Source and Channel Source Modifier.....	14
A.34.13.4.6 Waveform Sample Interpretation .....	14
A.34.13.4.7 Waveform Annotation Module .....	14
A.34.14 Electromyogram IOD .....	14
A.34.14.1 Electromyogram IOD Description .....	14
A.34.14.2 Electromyogram IOD Entity-Relationship Model.....	15
A34.14.3 Electromyogram IOD Module Table.....	15
A.34.14.4 Electromyogram IOD Constraints .....	15

A.34.14.4.1 Modality .....	15
A.34.14.4.2 Waveform Sequence .....	15
A.34.14.4.3 Number of Waveform Channels .....	15
A.34.14.4.4 Sampling Frequency .....	15
A.34.14.4.5 Channel Source and Channel Source Modifier .....	15
A.34.14.4.6 Waveform Sample Interpretation .....	16
A.34.14.4.7 Waveform Annotation Module .....	16
A.34.15 Electrooculogram IOD .....	16
A.34.15.1 Electrooculogram IOD Description .....	16
A.34.15.2 Electrooculogram IOD Entity-Relationship Model .....	16
A.34.15.3 Electrooculogram IOD Module Table .....	16
A.34.15.4 Electrooculogram IOD Constraints .....	17
A.34.15.4.1 Modality .....	17
A.34.15.4.2 Waveform Sequence .....	17
A.34.15.4.3 Number of Waveform Channels .....	17
A.34.15.4.4 Sampling Frequency .....	17
A.34.15.4.5 Channel Source and Channel Source Modifier .....	17
A.34.15.4.6 Waveform Sample Interpretation .....	17
A.34.15.4.7 Waveform Annotation Module .....	17
Changes to NEMA Standards Publications PS 3.4 Digital Imaging and Communications in Medicine (DICOM) Part 4: Service Class Specifications .....	17
B.5 Standard SOP classes .....	18
Changes to NEMA Standards Publications PS 3.6 Digital Imaging and Communications in Medicine (DICOM) Part 6: Data Dictionary .....	18
Changes to NEMA Standards Publications PS 3.16 Digital Imaging and Communications in Medicine (DICOM) Part 16: Content Mapping Resource .....	19
CID 29 Acquisition Modality .....	19
CID 30xx EEG Leads .....	20
CID 30yy EMG Leads .....	22
CID 30zz EOG Leads .....	42
CID 34xx EEG Annotations .....	44
CID 34yy EMG Annotations .....	44
CID 34zz EOG Annotations .....	44
Changes to NEMA Standards Publications PS 3.17 Digital Imaging and Communications in Medicine (DICOM) Part 17: Explanatory Information .....	71
Annex xxxx Neurophysiology Waveforms .....	72
xxxx.1 Purpose of this Annex .....	72
xxxx. ... Electroencephalography .....	72
xxxx. ... Polysomnography .....	72
xxxx. ... Electromyography .....	73
xxxx. ... Electrooculography .....	73
xxxx. ... Mapping of miscellaneous of recorded signal data to DICOM waveform objects .....	73
xxxx. ... Example DICOM Routine Scalp EEG Waveform Object .....	75

## Document History

2019/04/14	Version 0	Initial version, fragmentary
2019/05/15	Version 0	Results of WG-32 Meeting on 2019/04/18 added two EEG SOP Classes Invasive EEG-Video-Monitoring and High-density EEG added codes for locations near muscles (EMG) added codes for EOG electrode locations added screenshots of tables with codes for events and annotations
2019/05/20	Version 0	Results of WG 32 Meeting on 2019/05/20: Routine EEG → Routine Scalp EEG Invasive → Intracranial Table of Open Issues is a Table of Todos Still TODO: <ul style="list-style-type: none"><li>• LTM should be a separate IOD (10/20, same recording properties)</li><li>• Sleep EEG should be a separate IOD (10/20, same recording properties)</li></ul>

## Open Issues

1.	

## Closed Issues

1.	The DICOM Waveform IODs defined only allow 8 Bit sample values or 16 Bit sample values. In some cases a higher dynamic range is necessary to requested (24 Bit ADC). DICOM CP1819 [5] defines some new Value Representations and explicitly extends the list of supported Waveform Formats with 32 Bit and 64 Bit sample values. → 2019a PS3.3 C.10.9.1.5 (Waveform Bits Allocated 8Bit, 16 Bit, 32 Bit, 64 Bit)

## TODOs

1.	Identify other required EEG SOP Classes besides the “clinic routine” / qualify the generic EEG SOP Class
	2019/04/18: Add some relevant EEG SOP Classes from the Clinical Use Cases Document to illustrate the differences
	2019/05/15: LTM and Sleep EEG should not be covered by Routine Scalp EEG IOD, but have separate IODs (both 10/20 electrodes and same recording properties)
2.	EEG: localization of (surface of the skull, scalp) EEG electrodes other than the 10/10 or 10/20 (additional channels for arbitrary contacts; e.g. RSH)
3.	Localization of intracranial electrodes (subdural or intracerebral)
4.	Re-Using of Spatial Fiducials SOP Class to align positioning with CT and MR imaging.
5.	Recording of Body Position in Polysomnography
6.	Store the results of impedance testing Method 1: as Annotations assigned to dedicated channels Method 2: as channel properties (Channel Source Description) associated with defined points in time Method 3: as part of the Acquisition Context
7.	Synchronization Different objects (e.g. EEG and video, EEG and ECG objects) have to be synchronized. A description of the DICOM synchronization mechanisms can be found in <a href="#">PS3.3</a> (part 3 of the DICOM Standard) C.7.4.2 “Synchronization Module”. Different time protocols are supported: NTP, SNTP, PTP, IRIG, GPS. Maybe required: documentation of “estimated uncertainty” in sync (dependent on the used time protocol) Some use cases may require a periodical “resync” (e.g. in case of ext. stimulus) (different blocks of data <-> Multiplex Groups)
8.	Standardized annotations and events Events come from: <ul style="list-style-type: none"><li>• Machine</li><li>• External</li><li>• Software detecting something</li></ul> Annotations are applied by the tech. / by the doctor <ul style="list-style-type: none"><li>• during recording</li><li>• after recording</li></ul>

	<ul style="list-style-type: none"> <li>• during review</li> </ul>
	SOP Class to store Annotations after the recording (DICOM Structured Report)
	Separately or together with the review?
9.	External triggers, e.g. photic stimulation
	In some cases there are hundreds of events – maybe a separate channel would be useful to store them.
10.	<p>Compression</p> <p>A process for RED compression of recorded waveforms has to be described, RED compression has to be added to the list of transfer syntaxes</p>
	Other algorithms?
11.	<p>Montages</p> <p>A “montage” is a calculative combination of the recording electrodes to improve the viewing result. The waveform data itself is always stored as recorded (e.g. with common reference or bipolar).</p> <p>A method for storing montages will be included.</p> <ul style="list-style-type: none"> <li>• to allow to “recreate the review” = use same viewing setting</li> <li>• esp. important for intracranial EEG</li> </ul>
	Definition of standardized montages (Seeck et al.) referred by name?
	Methods to define own montages and store them with the recording.
12.	fMRI: synchronized imaging Requirements need to be defined

## Scope and Field of Application

This Supplement introduces **a number of** Services Classes for Storage of Neurophysiology Waveforms by adding the related Neurophysiology IODs and the necessary Neurophysiology Waveform Context Groups.

**Further explanations and information (which are required here?)**

This Supplement

- Adds a SOP Class to store **routine (clinic)** electroencephalography (EEG) data recording the electrical activity of the brain collected on the skull surface using electrode positions of the international 10/10 or 10/20 localization scheme.
- Adds a SOP Class to store electromyography (EMG) data recording the electrical activity of skeletal muscles ...

- Adds a SOP Class to store electrooculography (EOG) data collected near the eyes recording eye movement.
- Adds a SOP Class to store generic neurophysiology signals (EEG only ? - needs further definition)
- <further SOP Classes to be added ...>
- Adds a Context Group comprising the EEG lead identifiers according the international 10/10 and 10/20 localization scheme.
- Adds a Context Group comprising defined terms for conditions present during the EEG recording (to be used in EEG Acquisition Context)
- Adds a Context Group with standardized terms for Events and Annotations (EEG related)
- Adds a Context Group comprising the EMG lead identifiers ...
- Adds a Context Group comprising defined terms for conditions present during the EMG recording (to be used in EMG Acquisition Context)
- Adds a Context Group with standardized terms for Events and Annotations (EMG related)
- Adds a Context Group comprising the EOG lead identifiers ...
- Adds a Context Group comprising defined terms for conditions present during the EOG recording (to be used in EOG Acquisition Context)
- Adds a Context Group with standardized terms for Events and Annotations (EOG related)
- <further to be added ... >
- Adds a transfer syntax for DICOM waveforms using RED compression

This supplement includes a number of Addenda to the following parts of the DICOM Standard:

- |         |                                |
|---------|--------------------------------|
| PS 3.2  | Conformance                    |
| PS 3.3  | Information Object Definitions |
| PS 3.4  | Service Class Specifications   |
| PS 3.6  | Data Dictionary                |
| PS 3.16 | Content Mapping Resource       |
| PS 3.17 | Explanatory Information        |

## Changes to NEMA Standards Publications PS 3.2

### Digital Imaging and Communications in Medicine (DICOM) Part 2: Conformance

**Add new SOP Classes ...**

## Changes to NEMA Standards Publications PS 3.3

### Digital Imaging and Communications in Medicine (DICOM) Part 3: Information Object Definitions

**Add the synchronization Module to the Video Photographic Image IOD in PS3.3 Section A.32.7:**

Table A.32.7-1. Video Photographic Image IOD Modules

IE	Module	Reference	Usage
Patient	Patient	C.7.1.1	M
	Clinical Trial Subject	C.7.1.3	U
Study	General Study	C.7.2.1	M
	Patient Study	C.7.2.2	U
	Clinical Trial Study	C.7.2.3	U
Series	General Series	C.7.3.1	M
	Clinical Trial Series	C.7.3.2	U
<b>Frame of Reference</b>	<b>Synchronization</b>	<b>C.7.4.2</b>	<b>U</b>
Equipment	General Equipment	C.7.5.1	M
Image	General Image	C.7.6.1	M
	General Reference	C.12.4	U
	Cine	C.7.6.5	M
	Multi-frame	C.7.6.6	M
	Image Pixel	C.7.6.3	M
	Acquisition Context	C.7.6.14	M
	Device	C.7.6.12	M
	Specimen	C.7.6.22	C- Required if the Imaging Subject is a Specimen
	VL Image	C.8.12.1	M
	ICC Profile	C.11.15	U
	SOP Common	C.12.1	M
	Common Instance	C.12.2	U

	Reference		
	Frame Extraction	C.12.3	C – Required if the SOP Instance was created in response to a Frame-Level Retrieve Request

**Add the following new content to PS3.3 Section A.34:**

**Add A.34.11 Routine Electroencephalogram IOD**

**A.34.11 Routine Scalp Electroencephalogram IOD**

**A.34.11.1 Routine Scalp EEG IOD Description**

The Routine Scalp Electroencephalogram (EEG) IOD is the specification of digitized electrical signals from the patient encephalon collected on the skull surface, which has been acquired by an EEG modality or by an EEG acquisition function within an imaging modality.

Note:

This type of object could cover these clinical scenarios:

- Routine EEG
- EEG-Video-Monitoring – scalp EEG
- Longterm-EEG-Monitoring

as these have similar physical properties and use the same electrode location scheme

**A.34.11.2 Routine Scalp EEG IOD Entity-Relationship Model**

The E-R Model in Section A.34.1 applies to the Routine EEG IOD.

**A34.11.3 Routine Scalp EEG IOD Module Table**

**Table 34.11-1: Routine Scalp EEG IOD Modules**

IE	Module	Reference	Usage
Patient	Patient	C.7.1.1	M
	Clinical Trial Subject	C.7.1.3	U
Study	General Study	C.7.2.1	M
	Patient Study	C.7.2.2	U
	Clinical Trial Study	C.7.2.3	U
Series	General Series	C.7.3.1	M
	Clinical Trial Series	C.7.3.2	U
Frame of Reference	Synchronization	C.7.4.2	U
Equipment	General Equipment	C.7.5.1	M
Waveform	Waveform Identification	C.10.8	M
	Waveform	C.10.9	M
	Acquisition Context	C.7.6.14	M
	Waveform Annotation	C.10.10	C - Required if annotation is present
	SOP Common	C.12.1	M

#### A.34.11.4 Routine Scalp EEG IOD Constraints

##### A.34.11.4.1 Modality

The value of Modality (0008,0060) shall be EEG.

##### A.34.11.4.2 Waveform Sequence

The number of Waveform Sequence (5400,0100) Items shall be 1.

##### A.34.11.4.3 Number of Waveform Channels

The value of Number of Waveform Channels (003A,0005) in each Waveform Sequence Item shall be between 1 and 32, inclusive.

##### A.34.11.4.4 Sampling Frequency

The value of Sampling Frequency (003A,001A) in each Waveform Sequence Item shall be between 256 and 1024 Hz, inclusive.

##### A.34.11.4.5 Channel Source and Channel Source Modifier

The Defined CID for the Channel Source Sequence (003A,0208) in each Channel Definition Sequence Item shall be CID 30xx "EEG Leads".

Note:

Terms from other Context Groups may also be used for extended specification of the Channel Source, as declared in the Conformance Statement for an application (see PS3.2).

The Channel Source Modifiers Sequence (003A,0209) in each Channel Definition Sequence (003A,0200) Item shall be used to specify additional qualifiers of the semantics of the waveform source, including technique and anatomic location, if not encoded by the Channel Source Code Value. EEG recordings not using a common reference electrode shall contain the location of the reference electrode for the given channel in the first item of Channel Source Modifier. The defined CID for this item shall be CID 30xx "EEG Leads".

##### A.34.11.4.6 Waveform Sample Interpretation

The value of Waveform Sample Interpretation (5400,1006) in each Waveform Sequence Item shall be SS.

##### A.34.11.4.7 Waveform Annotation Module

The Defined CID for the Concept Name Code Sequence (0040,A043) in the Waveform Annotation Sequence (0040,B020) shall be CID 34xx "EEG Annotations".

**Add the following new content to PS3.3 Section A.34:**

**Add A.34.12 Intracranial EEG-Video-Monitoring IOD**

#### A.34.12 Intracranial EEG-Video-Monitoring IOD

##### A.34.12.1 Intracranial EEG-Video-Monitoring IOD Description

The Intracranial EEG-Video-Monitoring IOD is the specification of digitized electrical signals from the patient encephalon collected with intracranial electrodes placed subdurally or intracerebrally, which has been acquired by an EEG modality or by an EEG acquisition function within an imaging modality.

#### A.34.12.2 Intracranial EEG-Video-Monitoring EEG IOD Entity-Relationship Model

The E-R Model in Section A.34.1 applies to the Intracranial EEG-Video-Monitoring EEG IOD.

#### A34.12.3 Intracranial EEG-Video-Monitoring EEG IOD Module Table

**Table 34.11-1: Intracranial EEG-Video-Monitoring IOD Modules**

IE	Module	Reference	Usage
Patient	Patient	C.7.1.1	M
	Clinical Trial Subject	C.7.1.3	U
Study	General Study	C.7.2.1	M
	Patient Study	C.7.2.2	U
	Clinical Trial Study	C.7.2.3	U
Series	General Series	C.7.3.1	M
	Clinical Trial Series	C.7.3.2	U
Frame of Reference	Synchronization	C.7.4.2	U
Equipment	General Equipment	C.7.5.1	M
Waveform	Waveform Identification	C.10.8	M
	Waveform	C.10.9	M
	Acquisition Context	C.7.6.14	M
	Waveform Annotation	C.10.10	C - Required if annotation is present
	SOP Common	C.12.1	M

#### A.34.12.4 Intracranial EEG-Video-Monitoring EEG IOD Constraints

##### A.34.12.4.1 Modality

The value of Modality (0008,0060) shall be EEG.

##### A.34.12.4.2 Waveform Sequence

The number of Waveform Sequence (5400,0100) Items shall be 1.

##### A.34.12.4.3 Number of Waveform Channels

The value of Number of Waveform Channels (003A,0005) in each Waveform Sequence Item shall be between 1 and 64 or 128, inclusive.

##### A.34.12.4.4 Sampling Frequency

The value of Sampling Frequency (003A,001A) in each Waveform Sequence Item shall be between 256 and 1024 Hz, inclusive.

##### A.34.12.4.5 Channel Source and Channel Source Modifier

TODO: There will be no coded positions but other mechanisms will be necessary:  
Clin.Scen: "Location is arbitrary, exact electrode position in 3 axes can be specified"

Using referential positioning (spatial fiducials) with imaging.

The Channel Source Modifiers Sequence (003A,0209) in each Channel Definition Sequence (003A,0200) Item shall be used to specify additional qualifiers of the semantics of the waveform source, including technique and anatomic location, if not encoded by the Channel Source Code Value. EEG recordings not using a common reference electrode shall contain the location of the reference electrode for the given channel in the first item of Channel Source Modifier. The defined CID for this item shall be CID 30xx "EEG Leads".

#### A.34.12.4.6 Waveform Sample Interpretation

The value of Waveform Sample Interpretation (5400,1006) in each Waveform Sequence Item shall be SS.

#### A.34.12.4.7 Waveform Annotation Module

The Defined CID for the Concept Name Code Sequence (0040,A043) in the Waveform Annotation Sequence (0040,B020) shall be CID 34xx "EEG Annotations".

**Add the following new content to PS3.3 Section A.34:**

**Add A.34.12 High-density Electroencephalogram IOD**

#### A.34.13 High-density Electroencephalogram IOD

##### A.34.13.1 High-density EEG IOD Description

The High-density Electroencephalogram (EEG) IOD is the specification of digitized electrical signals from the patient encephalon collected on the skull surface <TODO: insert a characteristic trait to distinguish from Routine>, which has been acquired by an EEG modality or by an EEG acquisition function within an imaging modality.

##### A.34.13.2 High-density EEG IOD Entity-Relationship Model

The E-R Model in Section A.34.1 applies to the High-density EEG IOD.

##### A.34.13.3 High-density EEG IOD Module Table

Table 34.11-1: High-density EEG IOD Modules

IE	Module	Reference	Usage
Patient	Patient	C.7.1.1	M
	Clinical Trial Subject	C.7.1.3	U
Study	General Study	C.7.2.1	M
	Patient Study	C.7.2.2	U
	Clinical Trial Study	C.7.2.3	U
Series	General Series	C.7.3.1	M
	Clinical Trial Series	C.7.3.2	U
Frame of Reference	Synchronization	C.7.4.2	U
Equipment	General Equipment	C.7.5.1	M
Waveform	Waveform Identification	C.10.8	M
	Waveform	C.10.9	M
	Acquisition Context	C.7.6.14	M
	Waveform Annotation	C.10.10	C - Required if annotation is present
	SOP Common	C.12.1	M

#### A.34.13.4 High-density EEG IOD Constraints

##### A.34.13.4.1 Modality

The value of Modality (0008,0060) shall be EEG.

##### A.34.13.4.2 Waveform Sequence

The number of Waveform Sequence (5400,0100) Items shall be 1.

##### A.34.13.4.3 Number of Waveform Channels

The value of Number of Waveform Channels (003A,0005) in each Waveform Sequence Item shall be between 64 and 256, inclusive.

##### A.34.13.4.4 Sampling Frequency

The value of Sampling Frequency (003A,001A) in each Waveform Sequence Item shall be between 256 and 1024 Hz, inclusive.

##### A.34.13.4.5 Channel Source and Channel Source Modifier

TODO: There will be other coded positions or even other mechanisms (coordinates):

Clin.Scen: “Use of more densely spaced electrodes, set not according to the 10/20 system. Requires information on the 3D placement of the electrodes (electrode coordinate files, as measured by different systems, Polhemus, GPS, Geoscan, etc).”

The Channel Source Modifiers Sequence (003A,0209) in each Channel Definition Sequence (003A,0200) Item shall be used to specify additional qualifiers of the semantics of the waveform source, including technique and anatomic location, if not encoded by the Channel Source Code Value. EEG recordings not using a common reference electrode shall contain the location of the reference electrode for the given channel in the first item of Channel Source Modifier. The defined CID for this item shall be CID 30xx “EEG Leads”.

##### A.34.13.4.6 Waveform Sample Interpretation

The value of Waveform Sample Interpretation (5400,1006) in each Waveform Sequence Item shall be SS.

##### A.34.13.4.7 Waveform Annotation Module

The Defined CID for the Concept Name Code Sequence (0040,A043) in the Waveform Annotation Sequence (0040,B020) shall be CID 34xx “EEG Annotations”.

**Add the following new content to PS3.3 Section A.34:**

**Add A.34.14 Electromyogram IOD**

#### A.34.14 Electromyogram IOD

##### A.34.14.1 Electromyogram IOD Description

The Electromyography (EMG) IOD is the specification of digitized electrical signals evoked by the patient's muscle movements collected on the skin, which has been acquired by an EMG modality or by an EMG acquisition function within an polysomnography modality.

#### A.34.14.2 Electromyogram IOD Entity-Relationship Model

This IOD uses the E-R Model in Section A.1.2, with only the Waveform IE below the Series IE.

#### A34.14.3 Electromyogram IOD Module Table

**Table 34.11-1: Electromyogram IOD Modules**

IE	Module	Reference	Usage
Patient	Patient	C.7.1.1	M
	Clinical Trial Subject	C.7.1.3	U
Study	General Study	C.7.2.1	M
	Patient Study	C.7.2.2	U
	Clinical Trial Study	C.7.2.3	U
Series	General Series	C.7.3.1	M
	Clinical Trial Series	C.7.3.2	U
Frame of Reference	Synchronization	C.7.4.2	U
Equipment	General Equipment	C.7.5.1	M
Waveform	Waveform Identification	C.10.8	M
	Waveform	C.10.9	M
	Acquisition Context	C.7.6.14	M
	Waveform Annotation	C.10.10	C - Required if annotation is present
	SOP Common	C.12.1	M

#### A.34.14.4 Electromyogram IOD Constraints

##### A.34.14.4.1 Modality

The value of Modality (0008,0060) shall be EMG.

##### A.34.14.4.2 Waveform Sequence

The number of Waveform Sequence (5400,0100) Items will be defined by the standardization work group.

##### A.34.14.4.3 Number of Waveform Channels

The value of Number of Waveform Channels (003A,0005) in each Waveform Sequence Item will be defined by the standardization work group.

##### A.34.14.4.4 Sampling Frequency

The value of Sampling Frequency (003A,001A) in each Waveform Sequence will be defined by the standardization work group.

##### A.34.14.4.5 Channel Source and Channel Source Modifier

The Defined CID for the Channel Source Sequence (003A,0208) in each Channel Definition Sequence Item shall be CID 30yy "EMG Leads".

Note:

Terms from other Context Groups may also be used for extended specification of the Channel Source, as declared in the Conformance Statement for an application (see PS3.2).

EMG recordings not using a common reference electrode shall contain the location of the reference electrode for the given channel in the first item of Channel Source Modifier Sequence (003A,0209). The defined CID for this item shall be CID 300x "EMG Leads". Other allowed CIDs will be defined by the standardization work group.

#### A.34.14.4.6 Waveform Sample Interpretation

The value of Waveform Sample Interpretation (5400,1006) in each Waveform Sequence (0054,0100) Item shall be SS.

#### A.34.14.4.7 Waveform Annotation Module

The Defined CID for the Concept Name Code Sequence (0040,A043) in the Waveform Annotation Sequence (0040,B020) shall be **CID 34yy "EMG Annotations"**.

**Add the following new content to PS3.3 Section A.34:**

**Add A.34.15 Electrooculogram IOD**

### A.34.15 Electrooculogram IOD

#### A.34.15.1 Electrooculogram IOD Description

The Electrooculogram (EOG) IOD is the specification of digitized electrical signals evoked by the patient's eye movements collected on the face, which has been acquired by an EOG modality or by an EOG acquisition function within a polysomnography modality.

#### A.34.15.2 Electrooculogram IOD Entity-Relationship Model

This IOD uses the E-R Model in Section A.1.2, **with only the Waveform IE below the Series IE**.

#### A34.15.3 Electrooculogram IOD Module Table

Table 34.11-1: Electrooculogram IOD Modules

IE	Module	Reference	Usage
Patient	Patient	C.7.1.1	M
	Clinical Trial Subject	C.7.1.3	U
Study	General Study	C.7.2.1	M
	Patient Study	C.7.2.2	U
Series	Clinical Trial Study	C.7.2.3	U
	General Series	C.7.3.1	M
Frame of Reference	Clinical Trial Series	C.7.3.2	U
	Synchronization	C.7.4.2	U
Equipment	General Equipment	C.7.5.1	M
Waveform	Waveform Identification	C.10.8	M
	Waveform	C.10.9	M
	Acquisition Context	C.7.6.14	M
	Waveform Annotation	C.10.10	C - Required if annotation is present
	SOP Common	C.12.1	M

#### A.34.15.4 Electrooculogram IOD Constraints

##### A.34.15.4.1 Modality

The value of Modality (0008,0060) shall be EOG.

##### A.34.15.4.2 Waveform Sequence

The number of Waveform Sequence (5400,0100) Items shall be 1.

##### A.34.15.4.3 Number of Waveform Channels

The value of Number of Waveform Channels (003A,0005) in each Waveform Sequence Item will be defined by the standardization work group.

##### A.34.15.4.4 Sampling Frequency

The value of Sampling Frequency (003A,001A) in each Waveform Sequence Item will be defined by the standardization work group.

##### A.34.15.4.5 Channel Source and Channel Source Modifier

The Defined CID for the Channel Source Sequence (003A,0208) in each Channel Definition Sequence Item shall be CID 30zz "EOG Leads".

Note:

Terms from other Context Groups may also be used for extended specification of the Channel Source, as declared in the Conformance Statement for an application (see PS3.2).

EOG recordings not using a common reference electrode shall contain the location of the reference electrode for the given channel in the first item of Channel Source Modifier Sequence (003A,0209). The defined CID for this item shall be CID 30zz "EOG Leads". Other allowed CIDs will be defined by the standardization work group.

##### A.34.15.4.6 Waveform Sample Interpretation

The value of Waveform Sample Interpretation (5400,1006) in each Waveform Sequence (0054,0100) Item shall be SS.

##### A.34.15.4.7 Waveform Annotation Module

The defined CID for the Concept Name Code Sequence (0040,A043) in the Waveform Annotation Sequence (0040,B020) shall be CID 34zz "EOG Annotations".

**Add the following new content to PS3.3 C.7.3.1.1.1 Modality:**

**Add EEG Electroencephalogram**

**Add EMG Electromyogram**

**Add EOG Electrooculogram**

## Digital Imaging and Communications in Medicine (DICOM) Part 4: Service Class Specifications

**Add new SOP Class to PS 3.4 Annex B tables**

### B.5 Standard SOP classes

The SOP Classes in the Storage Service Class identify the Composite IODs to be stored. Table B.5-1 identifies Standard SOP Classes.

**Table B.5-1. Standard SOP Classes**

SOP Class Name	SOP Class UID	IOD Specification (defined in PS 3.3)
...	...	...
<u>Routine Scalp EEG Waveform Storage</u>	<u>1.2.840.10008.5.1.4.1.1.9.xx</u>	<u>Routine Scalp Electroencephalogram IOD</u>
<u>Intracranial EEG-Video Monitoring Waveform Storage</u>	<u>1.2.840.10008.5.1.4.1.1.9.aa</u>	<u>Intracranial EEG-Video-Monitoring IOD</u>
<u>High-density Electroencephalogram Waveform Storage</u>	<u>1.2.840.10008.5.1.4.1.1.9.bb</u>	<u>High-density Electroencephalogram IOD</u>
<u>EMG Waveform Storage</u>	<u>1.2.840.10008.5.1.4.1.1.9.yy</u>	<u>Electromyogram IOD</u>
<u>EOG Waveform Storage</u>	<u>1.2.840.10008.5.1.4.1.1.9.zz</u>	<u>Electrooculogram IOD</u>
...		

## Changes to NEMA Standards Publications PS 3.6

### Digital Imaging and Communications in Medicine (DICOM) Part 6: Data Dictionary

**Add new SOP Classes to PS 3.6 Annex A Table A-1:**

UID Value	UID Name	UID Type	Part
...	...	...	...
<u>1.2.840.10008.5.1.4.1.1.9.xx</u>	<u>Routine Scalp EEG Waveform Storage</u>	<u>SOP Class</u>	<u>PS 3.4</u>
<u>1.2.840.10008.5.1.4.1.1.9.aa</u>	<u>Intracranial EEG-Video Monitoring Waveform Storage</u>	<u>SOP Class</u>	<u>PS3.4</u>
<u>1.2.840.10008.5.1.4.1.1.9.bb</u>	<u>High-density Electroencephalogram Waveform Storage</u>	<u>SOP Class</u>	<u>PS3.4</u>
<u>1.2.840.10008.5.1.4.1.1.9.yy</u>	<u>EMG Waveform Storage</u>	<u>SOP Class</u>	<u>PS 3.4</u>

<u>1.2.840.10008.5.1.4.1.1.9.zz</u>	<u>EOG Waveform Storage</u>	<u>SOP Class</u>	<u>PS 3.4</u>
...	...	...	...

Add new Context Group UID Values to Table A-3:

Context UID	Context Identifier	Context Group Name
...	...	...
<u>1.2.840.10008.6.1.xxxx</u>	<u>CID 30xx</u>	<u>EEG Leads</u>
<u>1.2.840.10008.6.1.yyyy</u>	<u>CID 30yy</u>	<u>EMG Leads</u>
<u>1.2.840.10008.6.1.zzzz</u>	<u>CID 30zz</u>	<u>EOG Leads</u>
<u>1.2.840.10008.6.1.xxxx</u>	<u>CID 34xx</u>	<u>EEG Annotations</u>
<u>1.2.840.10008.6.1.yyyy</u>	<u>CID 34yy</u>	<u>EMG Annotations</u>
<u>1.2.840.10008.6.1.zzzz</u>	<u>CID 34zz</u>	<u>EOG Annotations</u>

### Changes to NEMA Standards Publications PS 3.16

#### Digital Imaging and Communications in Medicine (DICOM) Part 16: Content Mapping Resource

Add new Context Groups, Acquisition Context and SR IOD Templates

**TODO: check other Waveform relevant Context Groups and Templates like CID 3090 Time Synchronization Channel Types – maybe some of them need extension, too**

<TODO: ensure permission to use ISO/IEEE 11073 codes for EEG, EMG and EOG body sites, ...  
2019-04-18: presenting the codes of ISO/IEEE 11073 10101 Nomenclature for working on this supplement within this workgroup is permitted>

#### CID 29 Acquisition Modality

Add - | DCM | EEG | Electroencephalography

Add - | DCM | EMG | Electromyography

Add - | DCM | EOG | Electrooculography

### CID 30xx EEG Leads

This Context Group comprises the EEG lead identifiers of ISO/IEEE 11073-10101. The terms included in the table below may not constitute the complete list; see the ISO/IEEE Standard.

Note:

Codes reprinted by permission of IEEE, Copyright 2004 by IEEE. ISO/IEEE 11073-10101 available through <http://standards.ieee.org>.

**Resources:** <....>  
**Type:** Extensible  
**Version:** 20040624  
**UID:** <...>

**Table CID 30xx. EEG Leads**

Coding Scheme	Code Value	Acronym	Code Meaning	ISO/IEEE 11073 MDC Equivalent Reference ID (Informative)
MDC	7:996	Nz	Nasion (theta 112.5, phi 90)	MDC_HEAD_NASION_MID
MDC	7:1000	Fpz	Frontpolar (theta 90, phi 90)	MDC_HEAD_FRONT_POLAR_MID
MDC	7:1004	AFz	Anterior frontal (theta 67.5, phi 90)	MDC_HEAD_FRONT_ANT_MID
MDC	7:1008	Fz	Frontal (theta 45, phi 90)	MDC_HEAD_FRONT_MID
MDC	7:1012	FCz	Frontocentral (theta 22.5, phi 90)	MDC_HEAD_FRONT_CENT_MID
MDC	7:1016	Cz	Central (theta 0, phi 0)	MDC_HEAD_CENT_MID
MDC	7:1020	CPz	Centroparietal (theta 22.5, phi 270)	MDC_HEAD_PARIET_MEDIA
MDC	7:1024	Pz	Parietal (theta 45, phi 270)	MDC_HEAD_PARIET_MID
MDC	7:1028	POz	Parieto-occipital (theta 67.5, phi 270)	MDC_HEAD_PARIET_OCCIP_MID
MDC	7:1032	Oz	Occipital (theta 90, phi 270)	MDC_HEAD_OCCIP_MID
MDC	7:1036	Iz	Inionl (theta 112.5, phi 270)	MDC_HEAD_INION_MID
MDC	7:1041	Fp1	Frontopolar (theta 90, phi 108)	MDC_HEAD_FRONT_POLAR_L
MDC	7:1042	Fp2	Frontopolar (theta 90, phi 72)	MDC_HEAD_FRONT_POLAR_R
MDC	7:1049	F1	Frontal (theta 52.9, phi 112)	MDC_HEAD_FRONT_L_1
MDC	7:1054	F2	Frontal (theta 52.9, phi 68)	MDC_HEAD_FRONT_R_2
MDC	7:1057	F3	Frontal (theta 64, phi 129.1)	MDC_HEAD_FRONT_L_3
MDC	7:1062	F4	Frontal (theta 64, phi 50.9)	MDC_HEAD_FRONT_R_4
MDC	7:1065	F5	Frontal (theta 76.9, phi 136.9)	MDC_HEAD_FRONT_L_5
MDC	7:1070	F6	Frontal (theta 76.9, phi 43.1)	MDC_HEAD_FRONT_R_6
MDC	7:1073	F7	Frontal (theta 90, phi 144)	MDC_HEAD_FRONT_L_7
MDC	7:1078	F8	Frontal (theta 90, phi 36)	MDC_HEAD_FRONT_R_8
MDC	7:1081	F9	Frontal (theta 103.7, phi 149.4)	MDC_HEAD_FRONT_L_9
MDC	7:1086	F10	Frontal (theta 103.7, phi 30.6)	MDC_HEAD_FRONT_R_10
MDC	7:1089	FC1	Frontocentral (theta 33.4, phi 132.7)	MDC_HEAD_FRONT_CENT_L_1
MDC	7:1094	FC2	Frontocentral (theta 33.4, phi 47.3)	MDC_HEAD_FRONT_CENT_R_2

MDC	7:1097	FC3	Frontocentral (theta 51.7, phi 151.3)	MDC_HEAD_FRONT_CENT_L_3
MDC	7:1102	FC4	Frontocentral (theta 51.7, phi 28.7)	MDC_HEAD_FRONT_CENT_R_4
MDC	7:1105	FC5	Frontocentral (theta 71, phi 157.9)	MDC_HEAD_FRONT_CENT_L_5
MDC	7:1110	FC6	Frontocentral (theta 71, phi 22.1)	MDC_HEAD_FRONT_CENT_R_6
MDC	7:1113	FT7	Frontotemporal (theta 90, phi 162)	MDC_HEAD_FRONT_TEMPOR_L_7
MDC	7:1118	FT8	Frontotemporal (theta 90, phi 18)	MDC_HEAD_FRONT_TEMPOR_R_8
MDC	7:1121	FT9	Frontotemporal (theta 108.7, phi 164.3)	MDC_HEAD_FRONT_TEMPOR_L_9
MDC	7:1126	FT10	Frontotemporal (theta 108.7, phi 15.7)	MDC_HEAD_FRONT_TEMPOR_R_10
MDC	7:1129	C1	Central (theta 22.5, phi 180)	MDC_HEAD_CENT_L_1
MDC	7:1134	C2	Central (theta 22.5, phi 0)	MDC_HEAD_CENT_R_2
MDC	7:1137	C3	Central (theta 45, phi 180)	MDC_HEAD_CENT_L_3
MDC	7:1142	C4	Central (theta 45, phi 0)	MDC_HEAD_CENT_R_4
MDC	7:1145	C5	Central (theta 62.5, phi 180)	MDC_HEAD_CENT_L_5
MDC	7:1150	C6	Central (theta 62.5, phi 0)	MDC_HEAD_CENT_R_6
MDC	7:1153	CP1	Centroparietal (theta 33.4, phi 227.3)	MDC_HEAD_PARIET_CENT_L_1
MDC	7:1158	CP2	Centroparietal (theta 33.4, phi 312.7)	MDC_HEAD_PARIET_CENT_R_2
MDC	7:1161	CP3	Centroparietal (theta 51.7, phi 208.7)	MDC_HEAD_PARIET_CENT_L_3
MDC	7:1166	CP4	Centroparietal (theta 51.7, phi 331.3)	MDC_HEAD_PARIET_CENT_R_4
MDC	7:1169	CP5	Centroparietal (theta 71, phi 202.1)	MDC_HEAD_PARIET_CENT_L_5
MDC	7:1174	CP6	Centroparietal (theta 71, phi 337.9)	MDC_HEAD_PARIET_CENT_R_6
MDC	7:1177	P1	Parietal (theta 52.9, phi 248)	MDC_HEAD_PARIET_L_1
MDC	7:1182	P2	Parietal (theta 52.9, phi 292)	MDC_HEAD_PARIET_R_2
MDC	7:1185	P3	Parietal (theta 64, phi 230.9)	MDC_HEAD_PARIET_L_3
MDC	7:1190	P4	Parietal (theta 64, phi 309.1)	MDC_HEAD_PARIET_R_4
MDC	7:1193	P5	Parietal (theta 76.9, phi 223.1)	MDC_HEAD_PARIET_L_5
MDC	7:1198	P6	Parietal (theta 76.9, phi 316.9)	MDC_HEAD_PARIET_R_6
MDC	7:1201	P9	Parietal (theta 103.7, phi 210.6)	MDC_HEAD_PARIET_L_9
MDC	7:1206	P10	Parietal (theta 103.7, phi 329.4)	MDC_HEAD_PARIET_R_10
MDC	7:1209	O1	Occipital (theta 90, phi 252)	MDC_HEAD_OCCIP_L
MDC	7:1214	O2	Occipital (theta 90, phi 288)	MDC_HEAD_OCCIP_R
MDC	7:1217	AF3	Anterior frontal (theta 76.8, phi 118)	MDC_HEAD_FRONT_ANT_L_3

MDC	7:1222	AF4	Anterior frontal (theta 76.8, phi 62)	MDC_HEAD_FRONT_ANT_R_4
MDC	7:1225	AF7	Anterior frontal (theta 90, phi 126)	MDC_HEAD_FRONT_ANT_L_7
MDC	7:1230	AF8	Anterior frontal (theta 90, phi 54)	MDC_HEAD_FRONT_ANT_R_8
MDC	7:1233	PO3	Parieto-occipital (theta 76.8, phi 242)	MDC_HEAD_PARIET_OCCIP_L_3
MDC	7:1238	PO4	Parieto-occipital (theta 76.8, phi 298)	MDC_HEAD_PARIET_OCCIP_R_4
MDC	7:1241	PO7	Parieto-occipital (theta 90, phi 234)	MDC_HEAD_PARIET_OCCIP_L_7
MDC	7:1246	PO8	Parieto-occipital (theta 90, phi 306)	MDC_HEAD_PARIET_OCCIP_R_8
MDC	7:1249	T3	Temporal (theta 90, phi 180)	MDC_HEAD_TEMPOR_L_3
MDC	7:1254	T4	Temporal (theta 90, phi 0)	MDC_HEAD_TEMPOR_R_4
MDC	7:1257	T5	Temporal (theta 90, phi 216)	MDC_HEAD_TEMPOR_L_5
MDC	7:1262	T6	Temporal (theta 90, phi 324)	MDC_HEAD_TEMPOR_R_6
MDC	7:1265	T9	Temporal (theta 112.5, phi 180)	MDC_HEAD_TEMPOR_L_9
MDC	7:1270	T10	Temporal (theta 112.5, phi 0)	MDC_HEAD_TEMPOR_R_10
MDC	7:1273	TP7	Temporoparietal (theta 90, phi 198)	MDC_HEAD_TEMPOR_PARIET_L_7
MDC	7:1278	TP8	Temporoparietal (theta 90, phi 342)	MDC_HEAD_TEMPOR_PARIET_R_8
MDC	7:1281	TP9	Temporoparietal (theta 108.7, phi 195.7)	MDC_HEAD_TEMPOR_PARIET_L_9
MDC	7:1286	TP10	Temporoparietal (theta 108.7, phi 344.3)	MDC_HEAD_TEMPOR_PARIET_R_10
MDC	7:1289	A1	Left ear (theta 120, phi 180)	MDC_HEAD_EAR_L
MDC	7:1290	A2	Right ear (theta 120, phi 0)	MDC_HEAD_EAR_R
MDC	7:1297	T1	Anterior temporal (theta 106, phi 162)	MDC_HEAD_TEMPOR_ANT_L
MDC	7:1298	T2	Anterior temporal (theta 106, phi 18)	MDC_HEAD_TEMPOR_ANT_R
MDC	7:1305	Pg1	Pharyngeal	MDC_HEAD_PHARYNGEAL_L
MDC	7:1306	Pg2	Pharyngeal	MDC_HEAD_PHARYNGEAL_R
MDC	7:1313	Sp1	Sphenoidal	MDC_HEAD_SPHENOIDAL_L
MDC	7:1314	Sp2	Sphenoidal	MDC_HEAD_SPHENOIDAL_R

### CID 30yy EMG Leads

This Context Group comprises the EMG lead identifiers of ISO/IEEE 11073-10101. The terms included in the table below may not constitute the complete list; see the ISO/IEEE Standard.

#### Note

Codes reprinted by permission of IEEE, Copyright 2004 by IEEE. ISO/IEEE 11073-10101 available through <http://standards.ieee.org>.

Resources: <....>  
Type: Extensible  
Version: 20040624  
UID: <...>

Table CID 30yy. EMG Leads (only 3 samples ....)

Coding Scheme	Code Value	Code Meaning	ISO/IEEE 11073 MDC Equivalent Reference ID (Informative)
MDC	7:248	[Skeletal muscle, NOS, T-13000]	MDC_MUSC_SKELETAL
MDC	7:417	Musculus mylohyoideus, Left [Mylohyoid muscle, Left, T-13350-LFT,(submental EMG)]	MDC_MUSC_NECK_MYLOHYOID_L
MDC	7:994	Musculus interossei plantares, Right [Interosseous plantares muscles, Right, T-14970-RGT]	MDC_MUSC_LOEXT_INTEROSS_PLANTAR_R

Full List of Codes for sites for neurophysiological signal monitoring: locations near muscles (as screen shots)

(? Codes refer to SNOMED codes – should we better use them ?)

SNOMED Codes for some anatomic regions are already part of DICOM (see [PS3.16](#)) e.g. [CID 4028](#) Craniofacial Anatomic Regions or [CID 4031](#) Common Anatomic Regions.

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Skeletal, NOS     Body	[Skeletal muscle, NOS, T-13000]	MDC_MUSC_SKELETAL	248
Muscle   Skeletal, Left     Body	[Skeletal muscle, NOS, Left, T-13000-LFT]	MDC_MUSC_SKELETAL_L	249
Muscle   Skeletal, Right     Body	[Skeletal muscle, NOS, Right, T-13000-RGT]	MDC_MUSC_SKELETAL_R	250
Muscle   NOS   Head   Body	MUSCULI CAPITIS [Muscle of head, NOS, T-13100]	MDC_MUSC_HEAD	252
Muscle   Left   Head   Body	MUSCULI CAPITIS, Left [Muscle of head, NOS, Left, T-13100-LFT]	MDC_MUSC_HEAD_L	253
Muscle   Right   Head   Body	MUSCULI CAPITIS, Right [Muscle of head, NOS, Right, T-13100-RGT]	MDC_MUSC_HEAD_R	254
Muscle   Eye, NOS   Head   Body	MUSCULI BULBI [Extrinsic ocular muscle, NOS, T-13170]	MDC_MUSC_HEAD_EYE	256
Muscle   Eye, Left   Head   Body	MUSCULI BULBI, Left [Extrinsic ocular muscle, NOS, Left, T-13170-LFT]	MDC_MUSC_HEAD_EYE_L	257
Muscle   Eye, Right   Head   Body	MUSCULI BULBI, Right [Extrinsic ocular muscle, NOS, Right, T-13170-RGT]	MDC_MUSC_HEAD_EYE_R	258
Muscle   Rectus, Superior, NOS   Head   Body	Musculus rectus superior [Superior rectus muscle, T-13180]	MDC_MUSC_HEAD_RECT_SUP	260
Muscle   Rectus, Superior, Left   Head   Body	Musculus rectus superior, Left [Superior rectus muscle, Left, T-13180-LFT]	MDC_MUSC_HEAD_RECT_SUP_L	261
Muscle   Rectus, Superior, Right   Head   Body	Musculus rectus superior, Right [Superior rectus muscle, Right, T-13180-RGT]	MDC_MUSC_HEAD_RECT_SUP_R	262
Muscle   Rectus, Inferior, NOS   Head   Body	Musculus rectus inferior [Inferior rectus muscle, T-13190]	MDC_MUSC_HEAD_RECT_INF	264
Muscle   Rectus, Inferior, Left   Head   Body	Musculus rectus inferior, Left [Inferior rectus muscle, Left, T-13190-LFT]	MDC_MUSC_HEAD_RECT_INF_L	265
Muscle   Rectus, Inferior, Right   Head   Body	Musculus rectus inferior, Right [Inferior rectus muscle, Right, T-13190-RGT]	MDC_MUSC_HEAD_RECT_INF_R	266
Muscle   Rectus, Medialis, NOS   Head   Body	Musculus rectus medialis [Medial rectus muscle, T-13200]	MDC_MUSC_HEAD_RECT_MED	268
Muscle   Rectus, Medialis, Left   Head   Body	Musculus rectus medialis, Left [Medial rectus muscle, Left, T-13200-LFT]	MDC_MUSC_HEAD_RECT_MED_L	269

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Rectus, Medialis, Right   Head   Body	Musculus rectus medialis, Right [Medial rectus muscle, Right, T-13200-RGT]	MDC_MUSC_HEAD_RECT_MED_R	270
Muscle   Rectus, Lateralis, NOS   Head   Body	Musculus rectus lateralis [Lateral rectus muscle, T-13210]	MDC_MUSC_HEAD_RECT_LAT	272
Muscle   Rectus, Lateralis, Left   Head   Body	Musculus rectus lateralis, Left [Lateral rectus muscle, Left, T-13210-LFT]	MDC_MUSC_HEAD_RECT_LAT_L	273
Muscle   Rectus, Lateralis, Right   Head   Body	Musculus rectus lateralis, Right [Lateral rectus muscle, Right, T-13210-RGT]	MDC_MUSC_HEAD_RECT_LAT_R	274
Muscle   Obliquus, Superior, NOS   Head   Body	Musculus obliquus superior [Superior oblique muscle, T-13220]	MDC_MUSC_HEAD_OBLIQ_SUP	276
Muscle   Obliquus, Superior, Left   Head   Body	Musculus obliquus superior, Left [Superior oblique muscle, Left, T-13220-LFT]	MDC_MUSC_HEAD_OBLIQ_SUP_L	277
Muscle   Obliquus, Superior, Right   Head   Body	Musculus obliquus superior, Right [Superior oblique muscle, Right, T-13220-RGT]	MDC_MUSC_HEAD_OBLIQ_SUP_R	278
Muscle   Obliquus, Inferior, NOS   Head   Body	Musculus obliquus inferior [Inferior oblique muscle, T-13230]	MDC_MUSC_HEAD_OBLIQ_INF	280
Muscle   Obliquus, Inferior, Left   Head   Body	Musculus obliquus inferior, Left [Inferior oblique muscle, Left, T-13230-LFT]	MDC_MUSC_HEAD_OBLIQ_INF_L	281
Muscle   Obliquus, Inferior, Right   Head   Body	Musculus obliquus inferior, Right [Inferior oblique muscle, Right, T-13230-RGT]	MDC_MUSC_HEAD_OBLIQ_INF_R	282
Muscle   NOS   Head, Facial   Body	MUSCULI FACIALES ET MASTICATORES [Facial muscle, NOS, T-13150]	MDC_MUSC_HEAD_FACIAL	284
Muscle   Left   Head, Facial   Body	MUSCULI FACIALES ET MASTICATORES, Left [Facial muscle, NOS, Left, T-13150-LFT]	MDC_MUSC_HEAD_FACIAL_L	285
Muscle   Right   Head, Facial   Body	MUSCULI FACIALES ET MASTICATORES, Right [Facial muscle, NOS, Right, T-13150-RGT]	MDC_MUSC_HEAD_FACIAL_R	286
Muscle   Occipitofrontalis, Venter, Frontalis, NOS   Head   Body	Musculus occipitofrontalis, Venter frontalis [Occipitofrontalis muscle, frontal belly, T-13142]	MDC_MUSC_HEAD_OCCIPITOFRONT_VENTER	288

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Occipitofrontalis, Venter, Frontalis, Left   Head   Body	Musculus occipitofrontalis, Venter frontalis, Left [Occipitofrontalis muscle, frontal belly, Left, T-13142-LFT]	MDC_MUSC_HEAD_OCCIPITOFRONT_VENTER_L	289
Muscle   Occipitofrontalis, Venter, Frontalis, Right   Head   Body	Musculus occipitofrontalis, Venter frontalis, Right [Occipitofrontalis muscle, frontal belly, Right, T-13142-RGT]	MDC_MUSC_HEAD_OCCIPITOFRONT_VENTER_R	290
Muscle   Orbicularis, Oculi, NOS   Head   Body	Musculus orbicularis oculi [Orbicularis oculi muscle, NOS, T-13160]	MDC_MUSC_HEAD_ORBIC_Okul	292
Muscle   Orbicularis, Oculi, Left   Head   Body	Musculus orbicularis oculi, Left [Orbicularis oculi muscle, NOS, Left, T-13160-LFT]	MDC_MUSC_HEAD_ORBIC_Okul_L	293
Muscle   Orbicularis, Oculi, Right   Head   Body	Musculus orbicularis oculi, Right [Orbicularis oculi muscle, NOS, Right, T-13160-RGT]	MDC_MUSC_HEAD_ORBIC_Okul_R	294
Muscle   Orbicularis, Oculi, Pars, Orbitalis, NOS   Head   Body	Musculus orbicularis oculi, Pars orbitalis [Orbicularis oculi muscle, orbital part, T-13162]	MDC_MUSC_HEAD_ORBIC_Okul_PARS_ORBIT	296
Muscle   Orbicularis, Oculi, Pars, Orbitalis, Left   Head   Body	Musculus orbicularis oculi, Pars orbitalis, Left [Orbicularis oculi muscle, orbital part, Left, T-13162-LFT]	MDC_MUSC_HEAD_ORBIC_Okul_PARS_ORBIT_L	297
Muscle   Orbicularis, Oculi, Pars, Orbitalis, Right   Head   Body	Musculus orbicularis oculi, Pars orbitalis, Right [Orbicularis oculi muscle, orbital part, Right, T-13162-RGT]	MDC_MUSC_HEAD_ORBIC_Okul_PARS_ORBIT_R	298
Muscle   Auricularis, Posterior, NOS   Head   Body	Musculus auricularis posterior [Posterior auricularis muscle, T-13243]	MDC_MUSC_HEAD_AURIC_POST	300
Muscle   Auricularis, Posterior, Left   Head   Body	Musculus auricularis posterior, Left [Posterior auricularis muscle, Left, T-13243-LFT]	MDC_MUSC_HEAD_AURIC_POST_L	301
Muscle   Auricularis, Posterior, Right   Head   Body	Musculus auricularis posterior, Right [Posterior auricularis muscle, Right, T-13243-RGT]	MDC_MUSC_HEAD_AURIC_POST_R	302
Muscle   Orbicularis, Oris, NOS   Head   Body	Musculus orbicularis oris [Orbicularis oris muscle, T-13290]	MDC_MUSC_HEAD_ORBIC_ORIS	304
Muscle   Orbicularis, Oris, Left   Head   Body	Musculus orbicularis oris, Left [Orbicularis oris muscle, Left, T-13290-LFT]	MDC_MUSC_HEAD_ORBIC_ORIS_L	305
Muscle   Orbicularis, Oris, Right   Head   Body	Musculus orbicularis oris, Right [Orbicularis oris muscle, Right, T-13290-RGT]	MDC_MUSC_HEAD_ORBIC_ORIS_R	306

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Depressor, Anguli, Oris, NOS   Head, Facial   Body	Musculus depressor anguli oris [Depressor anguli oris muscle, T-13151]	MDC_MUSC_HEAD_DEPRESSOR_ANGUL_ORIS	308
Muscle   Depressor, Anguli, Oris, Left   Head, Facial   Body	Musculus depressor anguli oris, Left [Depressor anguli oris muscle, Left, T-13151-LFT]	MDC_MUSC_HEAD_DEPRESSOR_ANGUL_ORIS_L	309
Muscle   Depressor, Anguli, Oris, Right   Head, Facial   Body	Musculus depressor anguli oris, Right [Depressor anguli oris muscle, Right, T-13151-RGT]	MDC_MUSC_HEAD_DEPRESSOR_ANGUL_ORIS_R	310
Muscle   Risorius, NOS   Head, Facial   Body	Musculus risorius [Risorius muscle, T-13152]	MDC_MUSC_HEAD_RISOR	312
Muscle   Risorius, Left   Head, Facial   Body	Musculus risorius, Left [Risorius muscle, Left, T-13152-LFT]	MDC_MUSC_HEAD_RISOR_L	313
Muscle   Risorius, Right   Head, Facial   Body	Musculus risorius, Right [Risorius muscle, Right, T-13152-RGT]	MDC_MUSC_HEAD_RISOR_R	314
Muscle   Zygomaticus, Major, NOS   Head, Facial   Body	Musculus zygomaticus major [Zygomaticus major muscle, T-13153]	MDC_MUSC_HEAD_ZYGOMATIC_MAJOR	316
Muscle   Zygomaticus, Major, Left   Head, Facial   Body	Musculus zygomaticus major, Left [Zygomaticus major muscle, Left, T-13153-LFT]	MDC_MUSC_HEAD_ZYGOMATIC_MAJOR_L	317
Muscle   Zygomaticus, Major, Right   Head, Facial   Body	Musculus zygomaticus major, Right [Zygomaticus major muscle, Right, T-13153-RGT]	MDC_MUSC_HEAD_ZYGOMATIC_MAJOR_R	318
Muscle   Zygomaticus, Minor, NOS   Head, Facial   Body	Musculus zygomaticus minor [Zygomaticus minor muscle, T-13154]	MDC_MUSC_HEAD_ZYGOMATIC_MINOR	320
Muscle   Zygomaticus, Minor, Left   Head, Facial   Body	Musculus zygomaticus minor, Left [Zygomaticus minor muscle, Left, T-13154-LFT]	MDC_MUSC_HEAD_ZYGOMATIC_MINOR_L	321
Muscle   Zygomaticus, Minor, Right   Head, Facial   Body	Musculus zygomaticus minor, Right [Zygomaticus minor muscle, Right, T-13154-RGT]	MDC_MUSC_HEAD_ZYGOMATIC_MINOR_R	322
Muscle   Levator, Labii, Superioris, NOS   Head, Facial   Body	Musculus levator labii superioris [Levator labii superioris muscle, T-13155]	MDC_MUSC_HEAD_LEVATOR_LAB_SUP	324
Muscle   Levator, Labii, Superioris, Left   Head, Facial   Body	Musculus levator labii superioris, Left [Levator labii superioris muscle, Left, T-13155-LFT]	MDC_MUSC_HEAD_LEVATOR_LAB_SUP_L	325
Muscle   Levator, Labii, Superioris, Right   Head, Facial   Body	Musculus levator labii superioris, Right [Levator labii superioris muscle, Right, T-13155-RGT]	MDC_MUSC_HEAD_LEVATOR_LAB_SUP_R	326

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Levator, Labii, Superioris, Alaeque, Nasi, NOS   Head, Facial   Body	Musculus levator labii superioris alaeque nasi [Levator labii superioris alaeque nasi muscle, T-13156]	MDC_MUSC_HEADLEVATOR_LAB_SUP_AL_NASI	328
Muscle   Levator, Labii, Superioris, Alaeque, Nasi, Left   Head, Facial   Body	Musculus levator labii superioris alaeque nasi, Left [Levator labii superioris alaeque nasi muscle, Left, T-13156-LFT]	MDC_MUSC_HEADLEVATOR_LAB_SUP_AL_NASI_L	329
Muscle   Levator, Labii, Superioris, Alaeque, Nasi, Right   Head, Facial   Body	Musculus levator labii superioris alaeque nasi, Right [Levator labii superioris alaeque nasi muscle, Right, T-13156-RGT]	MDC_MUSC_HEADLEVATOR_LAB_SUP_AL_NASI_R	330
Muscle   Depressor, Labii, Inferioris, NOS   Head, Facial   Body	Musculus depressor labii inferioris [Depressor labii inferioris muscle, T-13157]	MDC_MUSC_HEADDEPRESSOR_LAB_INF	332
Muscle   Depressor, Labii, Inferioris, Left   Head, Facial   Body	Musculus depressor labii inferioris, Left [Depressor labii inferioris muscle, Left, T-13157-LFT]	MDC_MUSC_HEADDEPRESSOR_LAB_INF_L	333
Muscle   Depressor, Labii, Inferioris, Right   Head, Facial   Body	Musculus depressor labii inferioris, Right [Depressor labii inferioris muscle, Right, T-13157-RGT]	MDC_MUSC_HEADDEPRESSOR_LAB_INF_R	334
Muscle   Levator, Anguli, Oris, NOS   Head, Facial   Body	Musculus levator anguli oris [Levator anguli oris muscle, T-13158]	MDC_MUSC_HEADLEVATORANGUL_ORIS	336
Muscle   Levator, Anguli, Oris, Left   Head, Facial   Body	Musculus levator anguli oris, Left [Levator anguli oris muscle, Left, T-13158-LFT]	MDC_MUSC_HEADLEVATORANGUL_ORIS_L	337
Muscle   Levator, Anguli, Oris, Right   Head, Facial   Body	Musculus levator anguli oris, Right [Levator anguli oris muscle, Right, T-13158-RGT]	MDC_MUSC_HEADLEVATORANGUL_ORIS_R	338
Muscle   Buccinator, NOS   Head   Body	Musculus buccinator [Buccinator muscle, T-13159]	MDC_MUSC_HEADBUCCINATOR	340
Muscle   Buccinator, Left   Head   Body	Musculus buccinator, Left [Buccinator muscle, Left, T-13159-LFT]	MDC_MUSC_HEADBUCCINATOR_L	341
Muscle   Buccinator, Right   Head   Body	Musculus buccinator, Right [Buccinator muscle, Right, T-13159-RGT]	MDC_MUSC_HEADBUCCINATOR_R	342
Muscle   Mentalis, NOS   Head   Body	Musculus mentalis [Mentalis muscle, T-13250]	MDC_MUSC_HEADMENTAL	344
Muscle   Mentalis, Left   Head   Body	Musculus mentalis, Left [Mentalis muscle, Left, T-13250-LFT]	MDC_MUSC_HEADMENTAL_L	345
Muscle   Mentalis, Right   Head   Body	Musculus mentalis, Right [Mentalis muscle, Right, T-13250-RGT]	MDC_MUSC_HEADMENTAL_R	346
Muscle   Masseter, NOS   Head   Body	Musculus masseter [Masseter muscle, T-13260]	MDC_MUSC_HEADMASSETER	348
Muscle   Masseter, Left   Head   Body	Musculus masseter, Left [Masseter muscle, Left, T-13260-LFT]	MDC_MUSC_HEADMASSETER_L	349

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Masseter, Right   Head   Body	Musculus masseter, Right [Masseter muscle, Right, T-13260-RGT]	MDC_MUSC_HEADMASSETER_R	350
Muscle   Temporalis, NOS   Head   Body	Musculus temporalis [Temporal muscle, T-13270]	MDC_MUSC_HEADTEMPOR	352
Muscle   Temporalis, Left   Head   Body	Musculus temporalis, Left [Temporal muscle, Left, T-13270-LFT]	MDC_MUSC_HEADTEMPOR_L	353
Muscle   Temporalis, Right   Head   Body	Musculus temporalis, Right [Temporal muscle, Right, T-13270-RGT]	MDC_MUSC_HEADTEMPOR_R	354
Muscle   Pterygoideus, NOS   Head   Body	Musculus Pterygoideus [Pterygoid muscle, NOS, T-13280]	MDC_MUSC_HEADPTERYGOID	356
Muscle   Pterygoideus, Left   Head   Body	Musculus Pterygoideus, Left [Pterygoid muscle, Left, T-13280-LFT]	MDC_MUSC_HEADPTERYGOID_L	357
Muscle   Pterygoideus, Right   Head   Body	Musculus Pterygoideus, Right [Pterygoid muscle, Right, T-13280-RGT]	MDC_MUSC_HEADPTERYGOID_R	358
Muscle   Pterygoideus, Lateralis, NOS   Head   Body	Musculus Pterygoideus lateralis [Lateral pterygoid muscle, T-13281]	MDC_MUSC_HEADPTERYGOID_LAT	360
Muscle   Pterygoideus, Lateralis, Left   Head   Body	Musculus Pterygoideus lateralis, Left [Lateral pterygoid muscle, Left, T-13281-LFT]	MDC_MUSC_HEADPTERYGOID_LAT_L	361
Muscle   Pterygoideus, Lateralis, Right   Head   Body	Musculus Pterygoideus lateralis, Right [Lateral pterygoid muscle, Right, T-13281-RGT]	MDC_MUSC_HEADPTERYGOID_LAT_R	362
Muscle   Pterygoideus, Medialis, NOS   Head   Body	Musculus Pterygoideus, medialis [Medial pterygoid muscle, T-13282]	MDC_MUSC_HEADPTERYGOID_MED	364
Muscle   Pterygoideus, Medialis, Left   Head   Body	Musculus Pterygoideus, medialis, Left [Medial pterygoid muscle, Left, T-13282-LFT]	MDC_MUSC_HEADPTERYGOID_MED_L	365
Muscle   Pterygoideus, Medialis, Right   Head   Body	Musculus Pterygoideus, medialis, Right [Medial pterygoid muscle, Right, T-13282-RGT]	MDC_MUSC_HEADPTERYGOID_MED_R	366
Muscle   Linguae, NOS   Head   Body	MUSCULI LINGUAEE [Intrinsic lingual muscle, NOS, T-13510]	MDC_MUSCHEADLING	368
Muscle   Linguae, Left   Head   Body	MUSCULI LINGUAEE, Left [Intrinsic lingual muscle, NOS, Left, T-13510-LFT]	MDC_MUSCHEADLING_L	369
Muscle   Linguae, Right   Head   Body	MUSCULI LINGUAEE, Right [Intrinsic lingual muscle, NOS, Right, T-13510-RGT]	MDC_MUSCHEADLING_R	370
Muscle   Genioglossus, NOS   Head   Body	Musculus genioglossus [Genioglossus muscle, T-13520]	MDC_MUSCHEADGENIOGLOSS	372

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Genioglossus, Left   Head   Body	Musculus genioglossus, Left [Genioglossus muscle, Left, T-13520-LFT]	MDC_MUSC_HEAD_GENIOGLOSS_L	373
Muscle   Genioglossus, Right   Head   Body	Musculus genioglossus, Right [Genioglossus muscle, Right, T-13520-RGT]	MDC_MUSC_HEAD_GENIOGLOSS_R	374
Muscle   Laringis, NOS   Head   Body	MUSCULI LARINGIS [Laryngeal muscle, NOS, T-13490]	MDC_MUSC_HEAD_LARING	376
Muscle   Laringis, Left   Head   Body	MUSCULI LARINGIS, Left [Laryngeal muscle, NOS, Left, T-13490-LFT]	MDC_MUSC_HEAD_LARING_L	377
Muscle   Laringis, Right   Head   Body	MUSCULI LARINGIS, Right [Laryngeal muscle, NOS, Right, T-13490-RGT]	MDC_MUSC_HEAD_LARING_R	378
Muscle   Cricothyroideus, NOS   Head   Body	Musculus cricothyroideus [Cricothyroid muscle, T-13492]	MDC_MUSC_HEAD_CRICOTHYROID	380
Muscle   Cricothyroideus, Left   Head   Body	Musculus cricothyroideus, Left [Cricothyroid muscle, Left, T-13492-LFT]	MDC_MUSC_HEAD_CRICOTHYROID_L	381
Muscle   Cricothyroideus, Right   Head   Body	Musculus cricothyroideus, Right [Cricothyroid muscle, Right, T-13492-RGT]	MDC_MUSC_HEAD_CRICOTHYROID_R	382
Muscle   Thyroarytenoideus, NOS   Head   Body	Musculus thyroarytenoideus [Thyroarytenoid muscle, T-13497]	MDC_MUSC_HEAD_THYROARYTEROID	384
Muscle   Thyroarytenoideus, Left   Head   Body	Musculus thyroarytenoideus, Left [Thyroarytenoid muscle, Left, T-13497-LFT]	MDC_MUSC_HEAD_THYROARYTEROID_L	385
Muscle   Thyroarytenoideus, Right   Head   Body	Musculus thyroarytenoideus, Right [Thyroarytenoid muscle, Right, T-13497-RGT]	MDC_MUSC_HEAD_THYROARYTEROID_R	386
Muscle   NOS   Neck   Body	MUSCULI COLLI [Muscle of neck, NOS, T-13300]	MDC_MUSC_NECK	388
Muscle   Left   Neck   Body	MUSCULI COLLI, Left [Muscle of neck, NOS, Left, T-13300-LFT]	MDC_MUSC_NECK_L	389
Muscle   Right   Neck   Body	MUSCULI COLLI, Right [Muscle of neck, NOS, Right, T-13300-RGT]	MDC_MUSC_NECK_R	390
Muscle   Platysma, NOS   Neck   Body	Platysma [Platysma muscle, T-13480]	MDC_MUSC_NECK_PLATYSMA	392
Muscle   Platysma, Left   Neck   Body	Platysma, Left [Platysma muscle, Left, T-13480-LFT]	MDC_MUSC_NECK_PLATYSMA_L	393
Muscle   Platysma, Right   Neck   Body	Platysma, Right [Platysma muscle, Right, T-13480-RGT]	MDC_MUSC_NECK_PLATYSMA_R	394
Muscle   Longus, Capitis, NOS   Neck   Body	Musculus capitis longus [Longus capitis muscle, T-13130]	MDC_MUSC_NECK_CAPT_LONG	396

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Longus, Capitis, Left   Neck   Body	Musculus capitis longus, Left [Longus capitis muscle, Left, T-13130-LFT]	MDC_MUSC_NECK_CAPT_LONG_L	397
Muscle   Longus, Capitis, Right   Neck   Body	Musculus capitis longus, Right [Longus capitis muscle, Right, T-13130-RGT]	MDC_MUSC_NECK_CAPT_LONG_R	398
Muscle   Sternocleidomastoideus, NOS   Neck   Body	Musculus Sternocleidomastoideus [Sternocleidomastoid muscle, T-13310]	MDC_MUSC_NECK_STERNOCLÉIDOMASTOID	400
Muscle   Sternocleidomastoideus, Left   Neck   Body	Musculus Sternocleidomastoideus, Left [Sternocleidomastoid muscle, Left, T-13310-LFT]	MDC_MUSC_NECK_STERNOCLÉIDOMASTOID_L	401
Muscle   Sternocleidomastoideus, Right   Neck   Body	Musculus Sternocleidomastoideus, Right [Sternocleidomastoid muscle, Right, T-13310-RGT]	MDC_MUSC_NECK_STERNOCLÉIDOMASTOID_R	402
Muscle   Digastricus, NOS   Neck   Body	Musculus digastricus [Digastric muscle, T-13330]	MDC_MUSC_NECK_DIGRASIC	404
Muscle   Digastricus, Left   Neck   Body	Musculus digastricus, Left [Digastric muscle, Left, T-13330-LFT]	MDC_MUSC_NECK_DIGRASIC_L	405
Muscle   Digastricus, Right   Neck   Body	Musculus digastricus, Right [Digastric muscle, Right, T-13330-RGT]	MDC_MUSC_NECK_DIGRASIC_R	406
Muscle   Digastricus, Venter, Anterior, NOS   Neck   Body	Musculus digastricus, Venter anterior [Digastric muscle, anterior belly, T-13331]	MDC_MUSC_NECK_DIGRASIC_VENTER_ANT	408
Muscle   Digastricus, Venter, Anterior, Left   Neck   Body	Musculus digastricus, Venter anterior, Left [Digastric muscle, anterior belly, Left, T-13331-LFT]	MDC_MUSC_NECK_DIGRASIC_VENTER_ANT_L	409
Muscle   Digastricus, Venter, Anterior, Right   Neck   Body	Musculus digastricus, Venter anterior, Right [Digastric muscle, anterior belly, Right, T-13331-RGT]	MDC_MUSC_NECK_DIGRASIC_VENTER_ANT_R	410
Muscle   Digastricus, Venter, Posterior, NOS   Neck   Body	Musculus digastricus, Venter posterior [Digastric muscle, posterior belly, T-13332]	MDC_MUSC_NECK_DIGRASIC_VENTER_POST	412
Muscle   Digastricus, Venter, Posterior, Left   Neck   Body	Musculus digastricus, Venter posterior, Left [Digastric muscle, posterior belly, Left, T-13332-LFT]	MDC_MUSC_NECK_DIGRASIC_VENTER_POST_L	413
Muscle   Digastricus, Venter, Posterior, Right   Neck   Body	Musculus digastricus, Venter posterior, Right [Digastric muscle, posterior belly, Right, T-13332-RGT]	MDC_MUSC_NECK_DIGRASIC_VENTER_POST_R	414
Muscle   Mylohyoideus, NOS   Neck   Body	Musculus mylohyoideus [Mylohyoid muscle, T-13350, (submental EMG)]	MDC_MUSC_NECK_MYLOHYOID	416

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Mylohyoideus, Left   Neck   Body	Musculus mylohyoideus, Left [Mylohyoid muscle, Left, T-13350-LFT, (submental EMG)]	MDC_MUSC_NECK_MYLOHYOID_L	417
Muscle   Mylohyoideus, Right   Neck   Body	Musculus mylohyoideus, Right [Mylohyoid muscle, Right, T-13350-RGT, (submental EMG)]	MDC_MUSC_NECK_MYLOHYOID_R	418
Muscle   NOS   Trunk   Body	[Muscle of trunk, NOS, T-14000]	MDC_MUSC_TRUNK	420
Muscle   Left   Trunk   Body	[Muscle of trunk, NOS, Left, T-14000-LFT]	MDC_MUSC_TRUNK_L	421
Muscle   Right   Trunk   Body	[Muscle of trunk, NOS, Right, T-14000-RGT]	MDC_MUSC_TRUNK_R	422
Muscle   NOS   Back   Body	MUSCULI DORSI [Muscle of back, NOS, T-14090]	MDC_MUSC_BACK	424
Muscle   Left   Back   Body	MUSCULI DORSI, Left [Muscle of back, NOS, Left, T-14090-LFT]	MDC_MUSC_BACK_L	425
Muscle   Right   Back   Body	MUSCULI DORSI, Right [Muscle of back, NOS, Right, T-14090-RGT]	MDC_MUSC_BACK_R	426
Muscle   UpperBack, NOS   Back   Body	[Muscle of upper back, NOS, T-14170]	MDC_MUSC_BACK_UPPER	428
Muscle   UpperBack, Left   Back   Body	[Muscle of upper back, NOS, Left, T-14170-LFT]	MDC_MUSC_BACK_UPPER_L	429
Muscle   UpperBack, Right   Back   Body	[Muscle of upper back, NOS, Right, T-14170-RGT]	MDC_MUSC_BACK_UPPER_R	430
Muscle   LowerBack, NOS   Back   Body	[Muscle of lower back, NOS, T-14091]	MDC_MUSC_BACK_LOWER	432
Muscle   LowerBack, Left   Back   Body	[Muscle of lower back, NOS, Left, T-14091-LFT]	MDC_MUSC_BACK_LOWER_L	433
Muscle   LowerBack, Right   Back   Body	[Muscle of lower back, NOS, Right, T-14091-RGT]	MDC_MUSC_BACK_LOWER_R	434
Muscle   Trapezius, NOS   Back   Body	Musculus trapezius [Trapezius muscle, T-14171]	MDC_MUSC_BACK_TRAPEZ	436
Muscle   Trapezius, Left   Back   Body	Musculus trapezius, Left [Trapezius muscle, Left, T-14171-LFT]	MDC_MUSC_BACK_TRAPEZ_L	437
Muscle   Trapezius, Right   Back   Body	Musculus trapezius, Right [Trapezius muscle, Right, T-14171-RGT]	MDC_MUSC_BACK_TRAPEZ_R	438
Muscle   Latissimus, Dorsi, NOS   Back   Body	Musculus latissimus dorsi [Latissimus dorsi muscle, T-14172]	MDC_MUSC_BACK_LASTISSIM_DORS	440
Muscle   Latissimus, Dorsi, Left   Back   Body	Musculus latissimus dorsi, Left [Latissimus dorsi muscle, Left, T-14172-LFT]	MDC_MUSC_BACK_LASTISSIM_DORS_L	441

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Latissimus, Dorsi, Right   Back   Body	Musculus latissimus dorsi, Right [Latissimus dorsi muscle, Right, T-14172-RGT]	MDC_MUSC_BACK_LASTISSIM_DORS_R	442
Muscle   Rhomboideus, Major, NOS   Back   Body	Musculus rhomboideus major [Rhomboideus major muscle, T-14173]	MDC_MUSC_BACK_RHOMB_MAJOR	444
Muscle   Rhomboideus, Major, Left   Back   Body	Musculus rhomboideus major, Left [Rhomboideus major muscle, Left, T-14173-LFT]	MDC_MUSC_BACK_RHOMB_MAJOR_L	445
Muscle   Rhomboideus, Major, Right   Back   Body	Musculus rhomboideus major, Right [Rhomboideus major muscle, Right, T-14173-RGT]	MDC_MUSC_BACK_RHOMB_MAJOR_R	446
Muscle   Rhomboideus, Minor, NOS   Back   Body	Musculus rhomboideus minor [Rhomboideus minor muscle, T-14174]	MDC_MUSC_BACK_RHOMB_MINOR	448
Muscle   Rhomboideus, Minor, Left   Back   Body	Musculus rhomboideus minor, Left [Rhomboideus minor muscle, Left, T-14174-LFT]	MDC_MUSC_BACK_RHOMB_MINOR_L	449
Muscle   Rhomboideus, Minor, Right   Back   Body	Musculus rhomboideus minor, Right [Rhomboideus minor muscle, Right, T-14174-RGT]	MDC_MUSC_BACK_RHOMB_MINOR_R	450
Muscle   Levator, Scapulae, NOS   Back   Body	Musculus levator scapulae [Levator scapulae muscle, T-14180]	MDC_MUSC_BACK_SCAP_LEVATOR	452
Muscle   Levator, Scapulae, Left   Back   Body	Musculus levator scapulae, Left [Levator scapulae muscle, Left, T-14180-LFT]	MDC_MUSC_BACK_SCAP_LEVATOR_L	453
Muscle   Levator, Scapulae, Right   Back   Body	Musculus levator scapulae, Right [Levator scapulae muscle, Right, T-14180-RGT]	MDC_MUSC_BACK_SCAP_LEVATOR_R	454
Muscle   Serratus, Posterior, NOS   Back   Body	Musculus serratus posterior [Serratus posterior muscle, T-14190]	MDC_MUSC_BACK_SERRAT_POST	456
Muscle   Serratus, Posterior, Left   Back   Body	Musculus serratus posterior, Left [Serratus posterior muscle, Left, T-14190-LFT]	MDC_MUSC_BACK_SERRAT_POST_L	457
Muscle   Serratus, Posterior, Right   Back   Body	Musculus serratus posterior, Right [Serratus posterior muscle, Right, T-14190-RGT]	MDC_MUSC_BACK_SERRAT_POST_R	458
Muscle   Splenius, Capitis, NOS   Back   Body	Musculus splenius capitis [Splenius capitis muscle, T-13101]	MDC_MUSC_BACK_SPLEN_CAPT	460

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Splenius, Capitis, Left   Back   Body	Musculus splenius capitis, Left [Splenius capitis muscle, Left, T-13101-LFT]	MDC_MUSC_BACK_SPLEN_CAPT_L	461
Muscle   Splenius, Capitis, Right   Back   Body	Musculus splenius capitis, Right [Splenius capitis muscle, Right, T-13101-RGT]	MDC_MUSC_BACK_SPLEN_CAPT_R	462
Muscle   Splenius, Cervicis, NOS   Back   Body	Musculus splenius cervicis [Splenius cervicis muscle, T-13301]	MDC_MUSC_BACK_SPLEN_CERVIC	464
Muscle   Splenius, Cervicis, Left   Back   Body	Musculus splenius cervicis, Left [Splenius cervicis muscle, Left, T-13301-LFT]	MDC_MUSC_BACK_SPLEN_CERVIC_L	465
Muscle   Splenius, Cervicis, Right   Back   Body	Musculus splenius cervicis, Right [Splenius cervicis muscle, Right, T-13301-RGT]	MDC_MUSC_BACK_SPLEN_CERVIC_R	466
Muscle   Splenius, NOS   Back   Body	[Splenius muscle of trunk, T-14010]	MDC_MUSC_BACK_SPLEN	468
Muscle   Splenius, Left   Back   Body	[Splenius muscle of trunk, Left, T-14010-LFT]	MDC_MUSC_BACK_SPLEN_L	469
Muscle   Splenius, Right   Back   Body	[Splenius muscle of trunk, Right, T-14010-RGT]	MDC_MUSC_BACK_SPLEN_R	470
Muscle   Erector, Spinae, NOS   Back   Body	MUSCULUS ERECTOR SPINAE [Erector spinae muscle, T-14020]	MDC_MUSC_BACK_SPINAL_ERECTOR	472
Muscle   Erector, Spinae, Left   Back   Body	MUSCULUS ERECTOR SPINAE, Left [Erector spinae muscle, Left, T-14020-LFT]	MDC_MUSC_BACK_SPINAL_ERECTOR_L	473
Muscle   Erector, Spinae, Right   Back   Body	MUSCULUS ERECTOR SPINAE, Right [Erector spinae muscle, Right, T-14020-RGT]	MDC_MUSC_BACK_SPINAL_ERECTOR_R	474
Muscle   Spinalis, NOS   Back   Body	Musculus spinalis [Spinalis muscle, T-14050]	MDC_MUSC_BACK_SPINAL	476
Muscle   Spinalis, Left   Back   Body	Musculus spinalis, Left [Spinalis muscle, Left, T-14050-LFT]	MDC_MUSC_BACK_SPINAL_L	477
Muscle   Spinalis, Right   Back   Body	Musculus spinalis, Right [Spinalis muscle, Right, T-14050-RGT]	MDC_MUSC_BACK_SPINAL_R	478
Muscle   Spinalis, Thoracis, NOS   Back   Body	Musculus spinalis thoracis [Spinalis thoracis muscle, T-14051]	MDC_MUSC_BACK_SPINAL_THORAC	480
Muscle   Spinalis, Thoracis, Left   Back   Body	Musculus spinalis thoracis, Left [Spinalis thoracis muscle, Left, T-14051-LFT]	MDC_MUSC_BACK_SPINAL_THORAC_L	481
Muscle   Spinalis, Thoracis, Right   Back   Body	Musculus spinalis thoracis, Right [Spinalis thoracis muscle, Right, T-14051-RGT]	MDC_MUSC_BACK_SPINAL_THORAC_R	482

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Spinalis, Cervicis, NOS   Back   Body	Musculus spinalis cervicis [Spinalis cervicis muscle, T-14052]	MDC_MUSC_BACK_SPINAL_CERVIC	484
Muscle   Spinalis, Cervicis, Left   Back   Body	Musculus spinalis cervicis, Left [Spinalis cervicis muscle, Left, T-14052-LFT]	MDC_MUSC_BACK_SPINAL_CERVIC_L	485
Muscle   Spinalis, Cervicis, Right   Back   Body	Musculus spinalis cervicis, Right [Spinalis cervicis muscle, Right, T-14052-RGT]	MDC_MUSC_BACK_SPINAL_CERVIC_R	486
Muscle   Spinalis, Capitis, NOS   Back   Body	Musculus spinalis capitis [Spinalis capitis muscle, T-14053]	MDC_MUSC_BACK_SPINAL_CAPIT	488
Muscle   Spinalis, Capitis, Left   Back   Body	Musculus spinalis capitis, Left [Spinalis capitis muscle, Left, T-14053-LFT]	MDC_MUSC_BACK_SPINAL_CAPIT_L	489
Muscle   Spinalis, Capitis, Right   Back   Body	Musculus spinalis capitis, Right [Spinalis capitis muscle, Right, T-14053-RGT]	MDC_MUSC_BACK_SPINAL_CAPIT_R	490
Muscle   Semispinalis, NOS   Back   Body	Musculus semispinalis [Semispinalis muscle, NOS, T-14061]	MDC_MUSC_BACK_SEMISPINAL	492
Muscle   Semispinalis, Left   Back   Body	Musculus semispinalis, Left [Semispinalis muscle, NOS, Left, T-14061-LFT]	MDC_MUSC_BACK_SEMISPINAL_L	493
Muscle   Semispinalis, Right   Back   Body	Musculus semispinalis, Right [Semispinalis muscle, NOS, Right, T-14061-RGT]	MDC_MUSC_BACK_SEMISPINAL_R	494
Muscle   Semispinalis, Thoracis, NOS   Back   Body	Musculus semispinalis thoracis [Semispinalis thoracis muscle, T-14062]	MDC_MUSC_BACK_SEMISPINAL_THOR	496
Muscle   Semispinalis, Thoracis, Left   Back   Body	Musculus semispinalis thoracis, Left [Semispinalis thoracis muscle, Left, T-14062-LFT]	MDC_MUSC_BACK_SEMISPINAL_THOR_L	497
Muscle   Semispinalis, Thoracis, Right   Back   Body	Musculus semispinalis thoracis, Right [Semispinalis thoracis muscle, Right, T-14062-RGT]	MDC_MUSC_BACK_SEMISPINAL_THOR_R	498
Muscle   Semispinalis, Cervicis, NOS   Back   Body	Musculus semispinalis cervicis [Semispinalis cervicis muscle, T-14063]	MDC_MUSC_BACK_SEMISPINAL_CERV	500
Muscle   Semispinalis, Cervicis, Left   Back   Body	Musculus semispinalis cervicis, Left [Semispinalis cervicis muscle, Left, T-14063-LFT]	MDC_MUSC_BACK_SEMISPINAL_CERV_L	501
Muscle   Semispinalis, Cervicis, Right   Back   Body	Musculus semispinalis cervicis, Right [Semispinalis cervicis muscle, Right, T-14063-RGT]	MDC_MUSC_BACK_SEMISPINAL_CERV_R	502

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Semispinalis, Capitis, NOS   Back   Body	Musculus semispinalis capitis [Semispinalis capitis muscle, T-14064]	MDC_MUSC_BACK_SEMISPINAL_CAPIT	504
Muscle   Semispinalis, Capitis, Left   Back   Body	Musculus semispinalis capitis, Left [Semispinalis capitis muscle, Left, T-14064-LFT]	MDC_MUSC_BACK_SEMISPINAL_CAPIT_L	505
Muscle   Semispinalis, Capitis, Right   Back   Body	Musculus semispinalis capitis, Right [Semispinalis capitis muscle, Right, T-14064-RGT]	MDC_MUSC_BACK_SEMISPINAL_CAPIT_R	506
Muscle   Multifidi, NOS   Back   Body	Musculi multifidi [Multifidus muscle, T-14065]	MDC_MUSC_BACK_MULTIFID	508
Muscle   Multifidi, Left   Back   Body	Musculi multifidi, Left [Multifidus muscle, Left, T-14065-LFT]	MDC_MUSC_BACK_MULTIFID_L	509
Muscle   Multifidi, Right   Back   Body	Musculi multifidi, Right [Multifidus muscle, Right, T-14065-RGT]	MDC_MUSC_BACK_MULTIFID_R	510
Muscle   Interspinales, NOS   Back   Body	MUSCULI INTERSPINALES [Interspinalis muscles, NOS, T-14070]	MDC_MUSC_BACK_INTERSPINAL	512
Muscle   Interspinales, Left   Back   Body	MUSCULI INTERSPINALES, Left [Interspinalis muscles, NOS, Left, T-14070-LFT]	MDC_MUSC_BACK_INTERSPINAL_L	513
Muscle   Interspinales, Right   Back   Body	MUSCULI INTERSPINALES, Right [Interspinalis muscles, NOS, Right, T-14070-RGT]	MDC_MUSC_BACK_INTERSPINAL_R	514
Muscle   Interspinales, Cervicis, NOS   Back   Body	Musculi interspinales cervicis [Interspinalis cervicis muscle, T-14071]	MDC_MUSC_BACK_INTERSPINAL_CERVIC	516
Muscle   Interspinales, Cervicis, Left   Back   Body	Musculi interspinales cervicis, Left [Interspinalis cervicis muscle, Left, T-14071-LFT]	MDC_MUSC_BACK_INTERSPINAL_CERVIC_L	517
Muscle   Interspinales, Cervicis, Right   Back   Body	Musculi interspinales cervicis, Right [Interspinalis cervicis muscle, Right, T-14071-RGT]	MDC_MUSC_BACK_INTERSPINAL_CERVIC_R	518
Muscle   Interspinalis, Thoracis, NOS   Back   Body	Musculi interspinales thoracis [Interspinalis thoracis muscle, T-14072]	MDC_MUSC_BACK_INTERSPINAL_THORAC	520
Muscle   Interspinalis, Thoracis, Left   Back   Body	Musculi interspinales thoracis, Left [Interspinalis thoracis muscle, Left, T-14072-LFT]	MDC_MUSC_BACK_INTERSPINAL_THORAC_L	521
Muscle   Interspinalis, Thoracis, Right   Back   Body	Musculi interspinales thoracis, Right [Interspinalis thoracis muscle, Right, T-14072-RGT]	MDC_MUSC_BACK_INTERSPINAL_THORAC_R	522
Muscle   Interspinales, Lumborum, NOS   Back   Body	Musculi interspinales lumborum [Interspinalis lumborum muscle, T-14073]	MDC_MUSC_BACK_INTERSPINAL_LUMBOR	524

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Interspinales, Lumborum, Left   Back   Body	Musculi interspinales lumborum, Left [Interspinalis lumborum muscle, Left, T-14073-LFT]	MDC_MUSC_BACK_INTERSPINAL_LUMBOR_L	525
Muscle   Interspinales, Lumborum, Right   Back   Body	Musculi interspinales lumborum, Right [Interspinalis lumborum muscle, Right, T-14073-RGT]	MDC_MUSC_BACK_INTERSPINAL_LUMBOR_R	526
Muscle   NOS   Thorax   Body	MUSCULI THORACIS [Muscle of thorax, NOS, T-14100]	MDC_MUSC_THORAX	528
Muscle   Left   Thorax   Body	MUSCULI THORACIS, Left [Muscle of thorax, NOS, Left, T-14100-LFT]	MDC_MUSC_THORAX_L	529
Muscle   Right   Thorax   Body	MUSCULI THORACIS, Right [Muscle of thorax, NOS, Right, T-14100-RGT]	MDC_MUSC_THORAX_R	530
Muscle   Pectoralis, Major, NOS   Thorax   Body	Musculus pectoralis major Pectoralis major muscle, NOS, T-14110]	MDC_MUSC_THORAXPECTORAL_MAJOR	532
Muscle   Pectoralis, Major, Left   Thorax   Body	Musculus pectoralis major, Left [Pectoralis major muscle, Left, NOS, T-14110-LFT]	MDC_MUSC_THORAXPECTORAL_MAJOR_L	533
Muscle   Pectoralis, Major, Right   Thorax   Body	Musculus pectoralis major, Right [Pectoralis major muscle, Right, NOS, T-14110-RGT]	MDC_MUSC_THORAXPECTORAL_MAJOR_R	534
Muscle   Pectoralis, Minor, NOS   Thorax   Body	Musculus pectoralis minor [Pectoralis minor muscle, T-14120]	MDC_MUSC_THORAXPECTORAL_MINOR	536
Muscle   Pectoralis, Minor, Left   Thorax   Body	Musculus pectoralis minor, Left [Pectoralis minor muscle, Left, T-14120-LFT]	MDC_MUSC_THORAXPECTORAL_MINOR_L	537
Muscle   Pectoralis, Minor, Right   Thorax   Body	Musculus pectoralis minor, Right [Pectoralis minor muscle, Right, T-14120-RGT]	MDC_MUSC_THORAXPECTORAL_MINOR_R	538
Muscle   Subclavius, NOS   Thorax   Body	Musculus subclavius [Subclavius muscle, T-14130]	MDC_MUSC_THORAXSUBCLAV	540
Muscle   Subclavius, Left   Thorax   Body	Musculus subclavius, Left [Subclavius muscle, Left, T-14130-LFT]	MDC_MUSC_THORAXSUBCLAV_L	541
Muscle   Subclavius, Right   Thorax   Body	Musculus subclavius, Right [Subclavius muscle, Right, T-14130-RGT]	MDC_MUSC_THORAXSUBCLAV_R	542
Muscle   Serratus, Anterior, NOS   Thorax   Body	Musculus serratus anterior [Serratus anterior muscle, T-14140]	MDC_MUSC_THORAX_SERRAT_ANT	544

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Serratus, Anterior, Left   Thorax   Body	Musculus serratus anterior, Left [Serratus anterior muscle, Left, T-14140-LFT]	MDC_MUSC_THORAX_SERRAT_ANT_L	545
Muscle   Serratus, Anterior, Right   Thorax   Body	Musculus serratus anterior, Right [Serratus anterior muscle, Right, T-14140-RGT]	MDC_MUSC_THORAX_SERRAT_ANT_R	546
Muscle   Intercostales, NOS   Thorax   Body	Musculi intercostales [Intercostal muscle, NOS, T-14160]	MDC_MUSC_THORAX_INTERCOSTAL	548
Muscle   Intercostales, Left   Thorax   Body	Musculi intercostales, Left [Intercostal muscle, NOS, Left, T-14160-LFT]	MDC_MUSC_THORAX_INTERCOSTAL_L	549
Muscle   Intercostales, Right   Thorax   Body	Musculi intercostales, Right [Intercostal muscle, NOS, Right, T-14160-RGT]	MDC_MUSC_THORAX_INTERCOSTAL_R	550
Muscle   NOS   Thorax, Diaphragm   Body	DIAPHRAGMA [Diaphragm, NOS, T-Y2400]	MDC_MUSC_THORAX_DIAPHRAGM	552
Muscle   Left   Thorax, Diaphragm   Body	DIAPHRAGMA, Left [Diaphragm, NOS, Left, T-Y2400-LFT]	MDC_MUSC_THORAX_DIAPHRAGM_L	553
Muscle   Right   Thorax, Diaphragm   Body	DIAPHRAGMA, Right [Diaphragm, NOS, Right, T-Y2400-RGT]	MDC_MUSC_THORAX_DIAPHRAGM_R	554
Muscle   NOS   Abdomen   Body	MUSCULI ABDOMINIS [Muscle of abdomen, NOS, T-14200]	MDC_MUSC_ABDOM	556
Muscle   Left   Abdomen   Body	MUSCULI ABDOMINIS, Left [Muscle of abdomen, NOS, Left, T-14200-LFT]	MDC_MUSC_ABDOM_L	557
Muscle   Right   Abdomen   Body	MUSCULI ABDOMINIS, Right [Muscle of abdomen, NOS, Right, T-14200-RGT]	MDC_MUSC_ABDOM_R	558
Muscle   Rectus, Abdominis, NOS   Abdomen   Body	Musculus rectus abdominis [Rectus abdominis muscle, T-14260]	MDC_MUSC_ABDOM_ABDOMIN	560
Muscle   Rectus, Abdominis, Left   Abdomen   Body	Musculus rectus abdominis, Left [Rectus abdominis muscle, Left, T-14260-LFT]	MDC_MUSC_ABDOM_ABDOMIN_L	561
Muscle   Rectus, Abdominis, Right   Abdomen   Body	Musculus rectus abdominis, Right [Rectus abdominis muscle, Right, T-14260-RGT]	MDC_MUSC_ABDOM_ABDOMIN_R	562
Muscle   Obliquus, Externus, Abdominis, NOS   Abdomen   Body	Musculus obliquus externus abdominis [Obliquus externus abdominis muscle, T-14220]	MDC_MUSC_ABDOM_OBLIQ_EXT	564
Muscle   Obliquus, Externus, Abdominis, Left   Abdomen   Body	Musculus obliquus externus abdominis, Left [Obliquus externus abdominis muscle, Left, T-14220-LFT]	MDC_MUSC_ABDOM_OBLIQ_EXT_L	565

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Obliquus, Externus, Abdominis, Right   Abdomen   Body	Musculus obliquus externus abdominis, Right [Obliquus externus abdominis muscle, Right, T-14220-RGT]	MDC_MUSC_ABDOM_OBLIQ_EXT_R	566
Muscle   Obliquus, Internus, Abdominis, NOS   Abdomen   Body	Musculus obliquus internus abdominis [Obliquus internus abdominis muscle, T-14230]	MDC_MUSC_ABDOM_OBLIQ_INT	568
Muscle   Obliquus, Internus, Abdominis, Left   Abdomen   Body	Musculus obliquus internus abdominis, Left [Obliquus internus abdominis muscle, Left, T-14230-LFT]	MDC_MUSC_ABDOM_OBLIQ_INT_L	569
Muscle   Obliquus, Internus, Abdominis, Right   Abdomen   Body	Musculus obliquus internus abdominis, Right [Obliquus internus abdominis muscle, Right, T-14230-RGT]	MDC_MUSC_ABDOM_OBLIQ_INT_R	570
Muscle   Transversus, Abdominis, NOS   Abdomen   Body	Musculus transversus abdominis [Transversus abdominis muscle, T-14250]	MDC_MUSC_ABDOM_ABDOM_TRANSVERS	572
Muscle   Transversus, Abdominis, Left   Abdomen   Body	Musculus transversus abdominis, Left [Transversus abdominis muscle, Left, T-14250-LFT]	MDC_MUSC_ABDOM_ABDOM_TRANSVERS_L	573
Muscle   Transversus, Abdominis, Right   Abdomen   Body	Musculus transversus abdominis, Right [Transversus abdominis muscle, Right, T-14250-RGT]	MDC_MUSC_ABDOM_ABDOM_TRANSVERS_R	574
Muscle   Quadratus, Lumborum, NOS   Abdomen   Body	Musculus quadratus lumborum [Quadratus lumborum muscle, T-14270]	MDC_MUSC_ABDOM_LUMBOR_QUADRAT	576
Muscle   Quadratus, Lumborum, Left   Abdomen   Body	Musculus quadratus lumborum, Left [Quadratus lumborum muscle, Left, T-14270-LFT]	MDC_MUSC_ABDOM_LUMBOR_QUADRAT_L	577
Muscle   Quadratus, Lumborum, Right   Abdomen   Body	Musculus quadratus lumborum, Right [Quadratus lumborum muscle, Right, T-14270-RGT]	MDC_MUSC_ABDOM_LUMBOR_QUADRAT_R	578
Muscle   NOS   Abdomen, Pelvis   Body	MUSCULI DIAPHRAGMATICIS PELVIS [Muscle of perineum, NOS, T-14300]	MDC_MUSC_ABDOM_PELV	580
Muscle   Left   Abdomen, Pelvis   Body	MUSCULI DIAPHRAGMATICIS PELVIS, Left [Muscle of perineum, NOS, Left, T-14300-LFT]	MDC_MUSC_ABDOM_PELV_L	581
Muscle   Right   Abdomen, Pelvis   Body	MUSCULI DIAPHRAGMATICIS PELVIS, Right [Muscle of perineum, NOS, Right, T-14300-RGT]	MDC_MUSC_ABDOM_PELV_R	582
Muscle   Puborectalis, NOS   Abdomen   Body	Musculus puborectalis [Puborectalis muscle, T-14313]	MDC_MUSC_ABDOM_PUBORECT	584

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Puborectalis, Left   Abdomen   Body	Musculus puborectalis, Left [Puborectalis muscle, Left, T-14313-LFT]	MDC_MUSC_ABDOM_PUBORECT_L	585
Muscle   Puborectalis, Right   Abdomen   Body	Musculus puborectalis, Right [Puborectalis muscle, Right, T-14313-RGT]	MDC_MUSC_ABDOM_PUBORECT_R	586
Muscle   Coccygeus, NOS   Abdomen   Body	Musculus coccygeus [Coccygeus muscle, T-14320]	MDC_MUSC_ABDOM_COCCYG	588
Muscle   Coccygeus, Left   Abdomen   Body	Musculus coccygeus, Left [Coccygeus muscle, Left, T-14320-LFT]	MDC_MUSC_ABDOM_COCCYG_L	589
Muscle   Coccygeus, Right   Abdomen   Body	Musculus coccygeus, Right [Coccygeus muscle, Right, T-14320-RGT]	MDC_MUSC_ABDOM_COCCYG_R	590
Muscle   Sphincter, Ani   Abdomen   Body	Musculus sphincter ani [Sphincter ani muscle, NOS, T-14330]	MDC_MUSC_ABDOM_ANI_SPHINCTER	592
Muscle   Sphincter, Ani, Externus   Abdomen   Body	Musculus sphincter ani externus [Sphincter ani externus muscle, T-14332]	MDC_MUSC_ABDOM_ANI_SPHINCTER_EXT	596
Muscle   NOS   UpperExtremity   Body	MUSCULI MEMBRI SUPERIORIS [Muscle of upper extremity, NOS, T-13600]	MDC_MUSC_UPEXT	600
Muscle   Left   UpperExtremity   Body	MUSCULI MEMBRI SUPERIORIS, Left [Muscle of upper extremity, NOS, Left, T-13600-LFT]	MDC_MUSC_UPEXT_L	601
Muscle   Right   UpperExtremity   Body	MUSCULI MEMBRI SUPERIORIS, Right [Muscle of upper extremity, NOS, Right, T-13600-RGT]	MDC_MUSC_UPEXT_R	602
Muscle   Deltoides, NOS   UpperExtremity   Body	Musculus deltoideus [Deltoid muscle, T-13660]	MDC_MUSC_UPEXT_DELTOID	604
Muscle   Deltoides, Left   UpperExtremity   Body	Musculus deltoideus, Left [Deltoid muscle, Left, T-13660-LFT]	MDC_MUSC_UPEXT_DELTOID_L	605
Muscle   Deltoides, Right   UpperExtremity   Body	Musculus deltoideus, Right [Deltoid muscle, Right, T-13660-RGT]	MDC_MUSC_UPEXT_DELTOID_R	606
Muscle   Supraspinatus, NOS   UpperExtremity   Body	Musculus supraspinatus [Supraspinatus muscle, T-13610]	MDC_MUSC_UPEXT_SUPRASPINAT	608
Muscle   Supraspinatus, Left   UpperExtremity   Body	Musculus supraspinatus, Left [Supraspinatus muscle, Left, T-13610-LFT]	MDC_MUSC_UPEXT_SUPRASPINAT_L	609

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Supraspinatus, Right   UpperExtremity   Body	Musculus supraspinatus, Right [Supraspinatus muscle, Right, T-13610-RGT]	MDC_MUSC_UPEXT_SUPRASPINAT_R	610
Muscle   Infraspinatus, NOS   UpperExtremity   Body	Musculus infraspinatus [Infraspinatus muscle, T-13620]	MDC_MUSC_UPEXT_INFRASPINAT	612
Muscle   Infraspinatus, Left   UpperExtremity   Body	Musculus infraspinatus, Left [Infraspinatus muscle, Left, T-13620-LFT]	MDC_MUSC_UPEXT_INFRASPINAT_L	613
Muscle   Infraspinatus, Right   UpperExtremity   Body	Musculus infraspinatus, Right [Infraspinatus muscle, Right, T-13620-RGT]	MDC_MUSC_UPEXT_INFRASPINAT_R	614
Muscle   Teres, Minor, NOS   UpperExtremity   Body	Musculus teres minor [Teres minor muscle, T-13630]	MDC_MUSC_UPEXT_TERES_MINOR	616
Muscle   Teres, Minor, Left   UpperExtremity   Body	Musculus teres minor, Left [Teres minor muscle, Left, T-13630-LFT]	MDC_MUSC_UPEXT_TERES_MINOR_L	617
Muscle   Teres, Minor, Right   UpperExtremity   Body	Musculus teres minor, Right [Teres minor muscle, Right, T-13630-RGT]	MDC_MUSC_UPEXT_TERES_MINOR_R	618
Muscle   Teres, Major, NOS   UpperExtremity   Body	Musculus teres major [Teres major muscle, T-13640]	MDC_MUSC_UPEXT_TERES_MAJOR	620
Muscle   Teres, Major, Left   UpperExtremity   Body	Musculus teres major, Left [Teres major muscle, Left, T-13640-LFT]	MDC_MUSC_UPEXT_TERES_MAJOR_L	621
Muscle   Teres, Major, Right   UpperExtremity   Body	Musculus teres major, Right [Teres major muscle, Right, T-13640-RGT]	MDC_MUSC_UPEXT_TERES_MAJOR_R	622
Muscle   Subscapularis, NOS   UpperExtremity   Body	Musculus subscapularis [Subscapularis muscle, T-13650]	MDC_MUSC_UPEXT_SUBSCAP	624
Muscle   Subscapularis, Left   UpperExtremity   Body	Musculus subscapularis, Left [Subscapularis muscle, Left, T-13650-LFT]	MDC_MUSC_UPEXT_SUBSCAP_L	625
Muscle   Subscapularis, Right   UpperExtremity   Body	Musculus subscapularis, Right [Subscapularis muscle, Right, T-13650-RGT]	MDC_MUSC_UPEXT_SUBSCAP_R	626
Muscle   Biceps, Brachii, NOS   UpperExtremity   Body	Musculus biceps brachii [Biceps brachii muscle, T-13670]	MDC_MUSC_UPEXT_BRACHI_BICEPS	628

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Biceps, Brachii, Left   UpperExtremity   Body	Musculus biceps brachii, Left [Biceps brachii muscle, Left, T-13670-LFT]	MDC_MUSC_UPEXT_BRACHI_BICEPS_L	629
Muscle   Biceps, Brachii, Right   UpperExtremity   Body	Musculus biceps brachii, Right [Biceps brachii muscle, Right, T-13670-RGT]	MDC_MUSC_UPEXT_BRACHI_BICEPS_R	630
Muscle   Brachialis, NOS   UpperExtremity   Body	Musculus brachialis [Brachialis muscle, T-13680]	MDC_MUSC_UPEXT_BRACHIAL	632
Muscle   Brachialis, Left   UpperExtremity   Body	Musculus brachialis, Left [Brachialis muscle, Left, T-13680-LFT]	MDC_MUSC_UPEXT_BRACHIAL_L	633
Muscle   Brachialis, Right   UpperExtremity   Body	Musculus brachialis, Right [Brachialis muscle, Right, T-13680-RGT]	MDC_MUSC_UPEXT_BRACHIAL_R	634
Muscle   Coracobrachialis, NOS   UpperExtremity   Body	Musculus coracobrachialis [Coracobrachialis muscle, T-13710]	MDC_MUSC_UPEXT_CORACOBRACH	636
Muscle   Coracobrachialis, Left   UpperExtremity   Body	Musculus coracobrachialis, Left [Coracobrachialis muscle, Left, T-13710-LFT]	MDC_MUSC_UPEXT_CORACOBRACH_L	637
Muscle   Coracobrachialis, Right   UpperExtremity   Body	Musculus coracobrachialis, Right [Coracobrachialis muscle, Right, T-13710-RGT]	MDC_MUSC_UPEXT_CORACOBRACH_R	638
Muscle   Triceps, Brachii, NOS   UpperExtremity   Body	Musculus triceps brachii [Triceps brachii muscle, T-13690]	MDC_MUSC_UPEXT_BRACH_TRICEPS	640
Muscle   Triceps, Brachii, Left   UpperExtremity   Body	Musculus triceps brachii, Left [Triceps brachii muscle, Left, T-13690-LFT]	MDC_MUSC_UPEXT_BRACH_TRICEPS_L	641
Muscle   Triceps, Brachii, Right   UpperExtremity   Body	Musculus triceps brachii, Right [Triceps brachii muscle, Right, T-13690-RGT]	MDC_MUSC_UPEXT_BRACH_TRICEPS_R	642
Muscle   Triceps, Brachii, Caput, Longum, NOS   UpperExtremity   Body	Musculus triceps brachii, Caput longum [Triceps brachii muscle, long head, T-13691]	MDC_MUSC_UPEXT_BRACH_TRICEPS_CAP_LONG	644
Muscle   Triceps, Brachii, Caput, Longum, Left   UpperExtremity   Body	Musculus triceps brachii, Caput longum, Left [Triceps brachii muscle, long head, Left, T-13691-LFT]	MDC_MUSC_UPEXT_BRACH_TRICEPS_CAP_LONG_L	645
Muscle   Triceps, Brachii, Caput, Longum, Right   UpperExtremity   Body	Musculus triceps brachii, Caput longum, Right [Triceps brachii muscle, long head, Right, T-13691-RGT]	MDC_MUSC_UPEXT_BRACH_TRICEPS_CAP_LONG_R	646

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Triceps, Brachii, Caput, Laterale, NOS   UpperExtremity   Body	Musculus triceps brachii, Caput laterale [Triceps brachii muscle, lateral head, T-13692]	MDC_MUSC_UPEXT_BRACH_TRICEPS_CAP_LAT	648
Muscle   Triceps, Brachii, Caput, Laterale, Left   UpperExtremity   Body	Musculus triceps brachii, Caput laterale, Left [Triceps brachii muscle, lateral head, Left, T-13692-LFT]	MDC_MUSC_UPEXT_BRACH_TRICEPS_CAP_LAT_L	649
Muscle   Triceps, Brachii, Caput, Laterale, Right   UpperExtremity   Body	Musculus triceps brachii, Caput laterale, Right [Triceps brachii muscle, lateral head, Right, T-13692-RGT]	MDC_MUSC_UPEXT_BRACH_TRICEPS_CAP_LAT_R	650
Muscle   Triceps, Brachii, Caput, Mediale, NOS   UpperExtremity   Body	Musculus triceps brachii, Caput mediale [Triceps brachii muscle, medial head, T-13693]	MDC_MUSC_UPEXT_BRACH_TRICEPS_CAP_MED	652
Muscle   Triceps, Brachii, Caput, Mediale, Left   UpperExtremity   Body	Musculus triceps brachii, Caput mediale, Left [Triceps brachii muscle, medial head, Left, T-13693-LFT]	MDC_MUSC_UPEXT_BRACH_TRICEPS_CAP_MED_L	653
Muscle   Triceps, Brachii, Caput, Mediale, Right   UpperExtremity   Body	Musculus triceps brachii, Caput mediale, Right [Triceps brachii muscle, medial head, Right, T-13693-RGT]	MDC_MUSC_UPEXT_BRACH_TRICEPS_CAP_MED_R	654
Muscle   Anconeus, NOS   UpperExtremity   Body	Musculus anconeus [Anconeus muscle, T-13720]	MDC_MUSC_UPEXT_ANCON	656
Muscle   Anconeus, Left   UpperExtremity   Body	Musculus anconeus, Left [Anconeus muscle, Left, T-13720-LFT]	MDC_MUSC_UPEXT_ANCON_L	657
Muscle   Anconeus, Right   UpperExtremity   Body	Musculus anconeus, Right [Anconeus muscle, Right, T-13720-RGT]	MDC_MUSC_UPEXT_ANCON_R	658
Muscle   Pronator, Teres, NOS   UpperExtremity   Body	Musculus pronator teres [Pronator teres muscle, T-13740]	MDC_MUSC_UPEXT_PRONATOR	660
Muscle   Pronator, Teres, Left   UpperExtremity   Body	Musculus pronator teres, Left [Pronator teres muscle, Left, T-13740-LFT]	MDC_MUSC_UPEXT_PRONATOR_L	661
Muscle   Pronator, Teres, Right   UpperExtremity   Body	Musculus pronator teres, Right [Pronator teres muscle, Right, T-13740-RGT]	MDC_MUSC_UPEXT_PRONATOR_R	662
Muscle   Flexor, Carpi, Radialis, NOS   UpperExtremity   Body	Musculus flexor carpi radialis [Flexor carpi radialis muscle, T-13750]	MDC_MUSC_UPEXT_FLEX_CARPI_RADIAL	664
Muscle   Flexor, Carpi, Radialis, Left   UpperExtremity   Body	Musculus flexor carpi radialis, Left [Flexor carpi radialis muscle, Left, T-13750-LFT]	MDC_MUSC_UPEXT_FLEX_CARPI_RADIAL_L	665

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Flexor, Carpi, Radialis, Right   UpperExtremity   Body	Musculus flexor carpi radialis, Right [Flexor carpi radialis muscle, Right, T-13750-RGT]	MDC_MUSC_UPEXT_FLEX_CARPI_RADIAL_R	666
Muscle   Palmaris, Longus, NOS   UpperExtremity   Body	Musculus palmaris longus [Palmaris longus muscle, T-13760]	MDC_MUSC_UPEXT_PALMAR_LONG	668
Muscle   Palmaris, Longus, Left   UpperExtremity   Body	Musculus palmaris longus, Left [Palmaris longus muscle, Left, T-13760-LFT]	MDC_MUSC_UPEXT_PALMAR_LONG_L	669
Muscle   Palmaris, Longus, Right   UpperExtremity   Body	Musculus palmaris longus, Right [Palmaris longus muscle, Right, T-13760-RGT]	MDC_MUSC_UPEXT_PALMAR_LONG_R	670
Muscle   Flexor, Carpi, Ulnaris, NOS   UpperExtremity   Body	Musculus flexor carpi ulnaris [Flexor carpi ulnaris muscle, T-13770]	MDC_MUSC_UPEXT_FLEX_CARPI_ULNAR	672
Muscle   Flexor, Carpi, Ulnaris, Left   UpperExtremity   Body	Musculus flexor carpi ulnaris, Left [Flexor carpi ulnaris muscle, Left, T-13770-LFT]	MDC_MUSC_UPEXT_FLEX_CARPI_ULNAR_L	673
Muscle   Flexor, Carpi, Ulnaris, Right   UpperExtremity   Body	Musculus flexor carpi ulnaris, Right [Flexor carpi ulnaris muscle, Right, T-13770-RGT]	MDC_MUSC_UPEXT_FLEX_CARPI_ULNAR_R	674
Muscle   Flexor, Digitorum, Superficialis, NOS   UpperExtremity   Body	Musculus flexor digitorum superficialis [Flexor digitorum superficialis muscle, T-13781]	MDC_MUSC_UPEXT_FLEX_DIGIT_SUPERF	676
Muscle   Flexor, Digitorum, Superficialis, Left   UpperExtremity   Body	Musculus flexor digitorum superficialis, Left [Flexor digitorum superficialis muscle, Left, T-13781-LFT]	MDC_MUSC_UPEXT_FLEX_DIGIT_SUPERF_L	677
Muscle   Flexor, Digitorum, Superficialis, Right   UpperExtremity   Body	Musculus flexor digitorum superficialis, Right [Flexor digitorum superficialis muscle, Right, T-13781-RGT]	MDC_MUSC_UPEXT_FLEX_DIGIT_SUPERF_R	678
Muscle   Flexor, Digitorum, Profundus, NOS   UpperExtremity   Body	Musculus flexor digitorum profundus [Flexor digitorum profundus muscle, T-13784]	MDC_MUSC_UPEXT_FLEX_DIGIT_PROFUND	680
Muscle   Flexor, Digitorum, Profundus, Left   UpperExtremity   Body	Musculus flexor digitorum profundus, Left [Flexor digitorum profundus muscle, Left, T-13784-LFT]	MDC_MUSC_UPEXT_FLEX_DIGIT_PROFUND_L	681
Muscle   Flexor, Digitorum, Profundus, Right   UpperExtremity   Body	Musculus flexor digitorum profundus, Right [Flexor digitorum profundus muscle, Right, T-13784-RGT]	MDC_MUSC_UPEXT_FLEX_DIGIT_PROFUND_R	682
Muscle   Flexor , Pollicis, Longus, NOS   UpperExtremity   Body	Musculus flexor pollicis longus [Flexor pollicis longus muscle, T-13790]	MDC_MUSC_UPEXT_FLEX_POLLIC_LONG	684

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Flexor , Pollicis, Longus, Left   UpperExtremity   Body	Musculus flexor pollicis longus, Left [Flexor pollicis longus muscle, Left, T-13790-LFT]	MDC_MUSC_UPEXT_FLEX_POLLIC_LONG_L	685
Muscle   Flexor , Pollicis, Longus, Right   UpperExtremity   Body	Musculus flexor pollicis longus, Right [Flexor pollicis longus muscle, Right, T-13790-RGT]	MDC_MUSC_UPEXT_FLEX_POLLIC_LONG_R	686
Muscle   Pronator, Quadratus, NOS   UpperExtremity   Body	Musculus pronator quadratus [Pronator quadratus muscle, T-13810]	MDC_MUSC_UPEXT_PRONATOR_QUADRAT	688
Muscle   Pronator, Quadratus, Left   UpperExtremity   Body	Musculus pronator quadratus, Left [Pronator quadratus muscle, Left, T-13810-LFT]	MDC_MUSC_UPEXT_PRONATOR_QUADRAT_L	689
Muscle   Pronator, Quadratus, Right   UpperExtremity   Body	Musculus pronator quadratus, Right [Pronator quadratus muscle, Right, T-13810-RGT]	MDC_MUSC_UPEXT_PRONATOR_QUADRAT_R	690
Muscle   Brachioradialis, NOS   UpperExtremity   Body	Musculus brachioradialis [Brachioradialis muscle, T-13820]	MDC_MUSC_UPEXT_BRACHIORADIAL	692
Muscle   Brachioradialis, Left   UpperExtremity   Body	Musculus brachioradialis, Left [Brachioradialis muscle, Left, T-13820-LFT]	MDC_MUSC_UPEXT_BRACHIORADIAL_L	693
Muscle   Brachioradialis, Right   UpperExtremity   Body	Musculus brachioradialis, Right [Brachioradialis muscle, Right, T-13820-RGT]	MDC_MUSC_UPEXT_BRACHIORADIAL_R	694
Muscle   Extensor, Carpi, Radialis, Longus, NOS   UpperExtremity   Body	Musculus extensor carpi radialis longus [Extensor carpi radialis longus muscle, T-13831]	MDC_MUSC_UPEXT_EXTENS_CARP_RADIAL_LONG	696
Muscle   Extensor, Carpi, Radialis, Longus, Left   UpperExtremity   Body	Musculus extensor carpi radialis longus, Left [Extensor carpi radialis longus muscle, Left, T-13831-LFT]	MDC_MUSC_UPEXT_EXTENS_CARP_RADIAL_LONG_L	697
Muscle   Extensor, Carpi, Radialis, Longus, Right   UpperExtremity   Body	Musculus extensor carpi radialis longus, Right [Extensor carpi radialis longus muscle, Right, T-13831-RGT]	MDC_MUSC_UPEXT_EXTENS_CARP_RADIAL_LONG_R	698
Muscle   Extensor, Carpi, Radialis, Brevis, NOS   UpperExtremity   Body	Musculus extensor carpi radialis brevis [Extensor carpi radialis brevis muscle, T-13832]	MDC_MUSC_UPEXT_EXTENS_CARP_RADIAL_BREV	700
Muscle   Extensor, Carpi, Radialis, Brevis, Left   UpperExtremity   Body	Musculus extensor carpi radialis brevis, Left [Extensor carpi radialis brevis muscle, Left, T-13832-LFT]	MDC_MUSC_UPEXT_EXTENS_CARP_RADIAL_BREV_L	701
Muscle   Extensor, Carpi, Radialis, Brevis, Right   UpperExtremity   Body	Musculus extensor carpi radialis brevis, Right [Extensor carpi radialis brevis muscle, Right, T-13832-RGT]	MDC_MUSC_UPEXT_EXTENS_CARP_RADIAL_BREV_R	702

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Extensor, Digitorum, NOS   UpperExtremity   Body	Musculus extensor digitorum [Extensor digitorum muscle, T-13840]	MDC_MUSC_UPEXT_EXTENS_DIGIT	704
Muscle   Extensor, Digitorum, Left   UpperExtremity   Body	Musculus extensor digitorum, Left [Extensor digitorum muscle, Left, T-13840-LFT]	MDC_MUSC_UPEXT_EXTENS_DIGIT_L	705
Muscle   Extensor, Digitorum, Right   UpperExtremity   Body	Musculus extensor digitorum, Right [Extensor digitorum muscle, Right, T-13840-RGT]	MDC_MUSC_UPEXT_EXTENS_DIGIT_R	706
Muscle   Extensor, Dorsi, Minimi, NOS   UpperExtremity   Body	Musculus extensor digiti minimi [Extensor digiti minimi muscle, T-13842]	MDC_MUSC_UPEXT_EXTENS_DIGIT_MIN	708
Muscle   Extensor, Dorsi, Minimi, Left   UpperExtremity   Body	Musculus extensor digiti minimi, Left [Extensor digiti minimi muscle, Left, T-13842-LFT]	MDC_MUSC_UPEXT_EXTENS_DIGIT_MIN_L	709
Muscle   Extensor, Dorsi, Minimi, Right   UpperExtremity   Body	Musculus extensor digiti minimi, Right [Extensor digiti minimi muscle, Right, T-13842-RGT]	MDC_MUSC_UPEXT_EXTENS_DIGIT_MIN_R	710
Muscle   Extensor, Carpi, Ulnaris, NOS   UpperExtremity   Body	Musculus extensor carpi ulnaris [Extensor carpi ulnaris muscle, T-13850]	MDC_MUSC_UPEXT_EXTENS_CARP_ULNAR	712
Muscle   Extensor, Carpi, Ulnaris, Left   UpperExtremity   Body	Musculus extensor carpi ulnaris, Left [Extensor carpi ulnaris muscle, Left, T-13850-LFT]	MDC_MUSC_UPEXT_EXTENS_CARP_ULNAR_L	713
Muscle   Extensor, Carpi, Ulnaris, Right   UpperExtremity   Body	Musculus extensor carpi ulnaris, Right [Extensor carpi ulnaris muscle, Right, T-13850-RGT]	MDC_MUSC_UPEXT_EXTENS_CARP_ULNAR_R	714
Muscle   Supinator, NOS   UpperExtremity   Body	Musculus supinator [Supinator muscle, T-13860]	MDC_MUSC_UPEXT_SUPINATOR	716
Muscle   Supinator, Left   UpperExtremity   Body	Musculus supinator, Left [Supinator muscle, Left, T-13860-LFT]	MDC_MUSC_UPEXT_SUPINATOR_L	717
Muscle   Supinator, Right   UpperExtremity   Body	Musculus supinator, Right [Supinator muscle, Right, T-13860-RGT]	MDC_MUSC_UPEXT_SUPINATOR_R	718
Muscle   Abductor, Pollicis, Longus, NOS   UpperExtremity   Body	Musculus abductor pollicis longus [Abductor pollicis longus muscle, T-13881]	MDC_MUSC_UPEXT_ABDUC_POLLIC_LONG	720
Muscle   Abductor, Pollicis, Longus, Left   UpperExtremity   Body	Musculus abductor pollicis longus, Left [Abductor pollicis longus muscle, Left, T-13881-LFT]	MDC_MUSC_UPEXT_ABDUC_POLLIC_LONG_L	721

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Abductor, Pollicis, Longus, Right   UpperExtremity   Body	Musculus abductor pollicis longus, Right [Abductor pollicis longus muscle, Right, T-13881-RGT]	MDC_MUSC_UPEXT_ABDUC_POLLIC_LONG_R	722
Muscle   Extensor, Pollicis, Brevis, NOS   UpperExtremity   Body	Musculus extensor pollicis brevis [Extensor pollicis brevis muscle, T-13911]	MDC_MUSC_UPEXT_EXTENS_POLLIC_BREV	724
Muscle   Extensor, Pollicis, Brevis, Left   UpperExtremity   Body	Musculus extensor pollicis brevis, Left [Extensor pollicis brevis muscle, Left, T-13911-LFT]	MDC_MUSC_UPEXT_EXTENS_POLLIC_BREV_L	725
Muscle   Extensor, Pollicis, Brevis, Right   UpperExtremity   Body	Musculus extensor pollicis brevis, Right [Extensor pollicis brevis muscle, Right, T-13911-RGT]	MDC_MUSC_UPEXT_EXTENS_POLLIC_BREV_R	726
Muscle   Extensor, Pollicis, Longus, NOS   UpperExtremity   Body	Musculus extensor pollicis longus [Extensor pollicis longus muscle, T-13912]	MDC_MUSC_UPEXT_EXTENS_POLLIC_LONG	728
Muscle   Extensor, Pollicis, Longus, Left   UpperExtremity   Body	Musculus extensor pollicis longus, Left [Extensor pollicis longus muscle, Left, T-13912-LFT]	MDC_MUSC_UPEXT_EXTENS_POLLIC_LONG_L	729
Muscle   Extensor, Pollicis, Longus, Right   UpperExtremity   Body	Musculus extensor pollicis longus, Right [Extensor pollicis longus muscle, Right, T-13912-RGT]	MDC_MUSC_UPEXT_EXTENS_POLLIC_LONG_R	730
Muscle   Extensor, Indicis, NOS   UpperExtremity   Body	Musculus extensor indicis [Extensor indicis muscle, T-13913]	MDC_MUSC_UPEXT_EXTENS_INDIC	732
Muscle   Extensor, Indicis, Left   UpperExtremity   Body	Musculus extensor indicis, Left [Extensor indicis muscle, Left, T-13913-LFT]	MDC_MUSC_UPEXT_EXTENS_INDIC_L	733
Muscle   Extensor, Indicis, Right   UpperExtremity   Body	Musculus extensor indicis, Right [Extensor indicis muscle, Right, T-13913-RGT]	MDC_MUSC_UPEXT_EXTENS_INDIC_R	734
Muscle   Palmaris, Brevis, NOS   UpperExtremity   Body	Musculus palmaris brevis [Palmaris brevis muscle, T-13870]	MDC_MUSC_UPEXT_PALMAR_BREV	736
Muscle   Palmaris, Brevis, Left   UpperExtremity   Body	Musculus palmaris brevis, Left [Palmaris brevis muscle, Left, T-13870-LFT]	MDC_MUSC_UPEXT_PALMAR_BREV_L	737
Muscle   Palmaris, Brevis, Right   UpperExtremity   Body	Musculus palmaris brevis, Right [Palmaris brevis muscle, Right, T-13870-RGT]	MDC_MUSC_UPEXT_PALMAR_BREV_R	738
Muscle   Abductor, Pollicis, Brevis, NOS   UpperExtremity   Body	Musculus abductor pollicis brevis [Abductor pollicis brevis muscle, T-13882]	MDC_MUSC_UPEXT_ABDUC_POLLIC_BREV	740

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Abductor, Pollicis, Brevis, Left   UpperExtremity   Body	Musculus abductor pollicis brevis, Left [Abductor pollicis brevis muscle, Left, T-13882-LFT]	MDC_MUSC_UPEXT_ABDUC_POLLIC_BREV_L	741
Muscle   Abductor, Pollicis, Brevis, Right   UpperExtremity   Body	Musculus abductor pollicis brevis, Right [Abductor pollicis brevis muscle, Right, T-13882-RGT]	MDC_MUSC_UPEXT_ABDUC_POLLIC_BREV_R	742
Muscle   Flexor, Pollicis, Brevis, NOS   UpperExtremity   Body	Musculus flexor pollicis brevis [Flexor pollicis brevis muscle, T-13890]	MDC_MUSC_UPEXT_FLEX_POLLIC_BREV	744
Muscle   Flexor, Pollicis, Brevis, Left   UpperExtremity   Body	Musculus flexor pollicis brevis, Left [Flexor pollicis brevis muscle, Left, T-13890-LFT]	MDC_MUSC_UPEXT_FLEX_POLLIC_BREV_L	745
Muscle   Flexor, Pollicis, Brevis, Right   UpperExtremity   Body	Musculus flexor pollicis brevis, Right [Flexor pollicis brevis muscle, Right, T-13890-RGT]	MDC_MUSC_UPEXT_FLEX_POLLIC_BREV_R	746
Muscle   Opponens, Pollicis, NOS   UpperExtremity   Body	Musculus opponens pollicis [Opponens pollicis muscle, T-13920]	MDC_MUSC_UPEXT_OPPON_POLLIC	748
Muscle   Opponens, Pollicis, Left   UpperExtremity   Body	Musculus opponens pollicis, Left [Opponens pollicis muscle, Left, T-13920-LFT]	MDC_MUSC_UPEXT_OPPON_POLLIC_L	749
Muscle   Opponens, Pollicis, Right   UpperExtremity   Body	Musculus opponens pollicis, Right [Opponens pollicis muscle, Right, T-13920-RGT]	MDC_MUSC_UPEXT_OPPON_POLLIC_R	750
Muscle   Adductor, Pollicis, NOS   UpperExtremity   Body	Musculus adductor pollicis [Adductor pollicis muscle, T-13930]	MDC_MUSC_UPEXT_ADDUC_POLLIC	752
Muscle   Adductor, Pollicis, Left   UpperExtremity   Body	Musculus adductor pollicis, Left [Adductor pollicis muscle, Left, T-13930-LFT]	MDC_MUSC_UPEXT_ADDUC_POLLIC_L	753
Muscle   Adductor, Pollicis, Right   UpperExtremity   Body	Musculus adductor pollicis, Right [Adductor pollicis muscle, Right, T-13930-RGT]	MDC_MUSC_UPEXT_ADDUC_POLLIC_R	754
Muscle   Abductor, Digitii, Minimi, NOS   UpperExtremity   Body	Musculus abductor digitii minimi [Abductor digitii minimi muscle of hand, T-13940]	MDC_MUSC_UPEXT_ABDUC_DIGIT_MIN	756
Muscle   Abductor, Digitii, Minimi, Left   UpperExtremity   Body	Musculus abductor digitii minimi, Left [Abductor digitii minimi muscle of hand, Left, T-13940-LFT]	MDC_MUSC_UPEXT_ABDUC_DIGIT_MIN_L	757
Muscle   Abductor, Digitii, Minimi, Right   UpperExtremity   Body	Musculus abductor digitii minimi, Right [Abductor digitii minimi muscle of hand, Right, T-13940-RGT]	MDC_MUSC_UPEXT_ABDUC_DIGIT_MIN_R	758

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Flexor, Digitii, Minimi, Brevis, NOS   UpperExtremity   Body	Musculus flexor digitii minimi brevis [Flexor digitii minimi brevis muscle of hand, T-13950]	MDC_MUSC_UPEXT_FLEX_DIGIT_BREV_MIN	760
Muscle   Flexor, Digitii, Minimi, Brevis, Left   UpperExtremity   Body	Musculus flexor digitii minimi brevis, Left [Flexor digitii minimi brevis muscle of hand, Left, T-13950-LFT]	MDC_MUSC_UPEXT_FLEX_DIGIT_BREV_MIN_L	761
Muscle   Flexor, Digitii, Minimi, Brevis, Right   UpperExtremity   Body	Musculus flexor digitii minimi brevis, Right [Flexor digitii minimi brevis muscle of hand, Right, T-13950-RGT]	MDC_MUSC_UPEXT_FLEX_DIGIT_BREV_MIN_R	762
Muscle   Opponens, Digitii, Minimi, NOS   UpperExtremity   Body	Musculus opponens digitii minimi [Opponens digitii minimi muscle of hand, T-13960]	MDC_MUSC_UPEXT_OPPON_DIGIT_MIN	764
Muscle   Opponens, Digitii, Minimi, Left   UpperExtremity   Body	Musculus opponens digitii minimi, Left [Opponens digitii minimi muscle of hand, Left, T-13960-LFT]	MDC_MUSC_UPEXT_OPPON_DIGIT_MIN_L	765
Muscle   Opponens, Digitii, Minimi, Right   UpperExtremity   Body	Musculus opponens digitii minimi, Right [Opponens digitii minimi muscle of hand, Right, T-13960-RGT]	MDC_MUSC_UPEXT_OPPON_DIGIT_MIN_R	766
Muscle   Lumbricales, NOS   UpperExtremity   Body	Musculi lumbricales [Lumbrical muscles of hand, T-13970]	MDC_MUSC_UPEXT_LUMBRICAL	768
Muscle   Lumbricales, Left   UpperExtremity   Body	Musculi lumbricales, Left [Lumbrical muscles of hand, Left, T-13970-LFT]	MDC_MUSC_UPEXT_LUMBRICAL_L	769
Muscle   Lumbricales, Right   UpperExtremity   Body	Musculi lumbricales, Right [Lumbrical muscles of hand, Right, T-13970-RGT]	MDC_MUSC_UPEXT_LUMBRICAL_R	770
Muscle   Interossei, Dorsales, NOS   UpperExtremity   Body	Musculi interossei dorsales [Dorsal interosseous muscles of hand, T-13981]	MDC_MUSC_UPEXT_INTEROSS_DORSAL	772
Muscle   Interossei, Dorsales, Left   UpperExtremity   Body	Musculi interossei dorsales, Left [Dorsal interosseous muscles of hand, Left, T-13981-LFT]	MDC_MUSC_UPEXT_INTEROSS_DORSAL_L	773
Muscle   Interossei, Dorsales, Right   UpperExtremity   Body	Musculi interossei dorsales, Right [Dorsal interosseous muscles of hand, Right, T-13981-RGT]	MDC_MUSC_UPEXT_INTEROSS_DORSAL_R	774
Muscle   Interossei, Palmares, NOS   UpperExtremity   Body	Musculi interossei palmares [Palmar interosseous muscles of hand, T-13982]	MDC_MUSC_UPEXT_INTEROSS_PALMAR	776
Muscle   Interossei, Palmares, Left   UpperExtremity   Body	Musculi interossei palmares, Left [Palmar interosseous muscles of hand, Left, T-13982-LFT]	MDC_MUSC_UPEXT_INTEROSS_PALMAR_L	777

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Interossei, Palmares, Right   UpperExtremity   Body	Musculi interossei palmares, Right [Palmar interosseousmuscles of hand, Right, T-13982-RGT]	MDC_MUSC_UPEXT_INTEROSS_PALMAR_R	778
Muscle   Hip, Thigh, NOS   LowerExtremity   Body	[Muscle of hip and thigh, NOS, T-14400]	MDC_MUSC_LOEXT_HIP_THIGH	780
Muscle   Hip, Thigh, Left   LowerExtremity   Body	[Muscle of hip and thigh, NOS, Left, T-14400-LFT]	MDC_MUSC_LOEXT_HIP_THIGH_L	781
Muscle   Hip, Thigh, Right   LowerExtremity   Body	[Muscle of hip and thigh, NOS, Right, T-14400-RGT]	MDC_MUSC_LOEXT_HIP_THIGH_R	782
Muscle   Leg, NOS   LowerExtremity   Body	[Muscle of leg, NOS, T-14700]	MDC_MUSC_LOEXT_LEG	784
Muscle   Leg, Left   LowerExtremity   Body	[Muscle of leg, NOS, Left, T-14700-LFT]	MDC_MUSC_LOEXT_LEG_L	785
Muscle   Leg, Right   LowerExtremity   Body	[Muscle of leg, NOS, Right, T-14700-RGT]	MDC_MUSC_LOEXT_LEG_R	786
Muscle   Foot, NOS   LowerExtremity   Body	[Muscle of foot, NOS, T-14900]	MDC_MUSC_LOEXT FOOT	788
Muscle   Foot, Left   LowerExtremity   Body	[Muscle of foot, NOS, Left, T-14900-LFT]	MDC_MUSC_LOEXT FOOT_L	789
Muscle   Foot, Right   LowerExtremity   Body	[Muscle of foot, NOS, Right, T-14900-RGT]	MDC_MUSC_LOEXT FOOT_R	790
Muscle   Iliopsoas, NOS   LowerExtremity   Body	Musculus iliopsoas [Iliopsoas muscle, NOS, T-14410]	MDC_MUSC_LOEXT_ILLIOPS	792
Muscle   Iliopsoas, Left   LowerExtremity   Body	Musculus iliopsoas, Left [Iliopsoas muscle, NOS, Left, T-14410-LFT]	MDC_MUSC_LOEXT_ILLIOPS_L	793
Muscle   Iliopsoas, Right   LowerExtremity   Body	Musculus iliopsoas, Right [Iliopsoas muscle, NOS, Right, T-14410-RGT]	MDC_MUSC_LOEXT_ILLIOPS_R	794
Muscle   Gluteus, Maximus, NOS   LowerExtremity   Body	Musculus gluteus maximus [Gluteus maximus muscle, T-14430]	MDC_MUSC_LOEXT_GLUT_MAX	796
Muscle   Gluteus, Maximus, Left   LowerExtremity   Body	Musculus gluteus maximus, Left [Gluteus maximus muscle, Left, T-14430-LFT]	MDC_MUSC_LOEXT_GLUT_MAX_L	797
Muscle   Gluteus, Maximus, Right   LowerExtremity   Body	Musculus gluteus maximus, Right [Gluteus maximus muscle, Right, T-14430-RGT]	MDC_MUSC_LOEXT_GLUT_MAX_R	798
Muscle   Gluteus, Medius, NOS   LowerExtremity   Body	Musculus gluteus medius [Gluteus medius muscle, T-14440]	MDC_MUSC_LOEXT_GLUT_MED	800

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Gluteus, Medius, Left   LowerExtremity   Body	Musculus gluteus medius, Left [Gluteus medius muscle, Left, T-14440-LFT]	MDC_MUSC_LOEXT_GLUT_MED_L	801
Muscle   Gluteus, Medius, Right   LowerExtremity   Body	Musculus gluteus medius, Right [Gluteus medius muscle, Right, T-14440-RGT]	MDC_MUSC_LOEXT_GLUT_MED_R	802
Muscle   Gluteus, Minimus, NOS   LowerExtremity   Body	Musculus gluteus minimus [Gluteus minimus muscle, T-14450]	MDC_MUSC_LOEXT_GLUT_MIN	804
Muscle   Gluteus, Minimus, Left   LowerExtremity   Body	Musculus gluteus minimus, Left [Gluteus minimus muscle, Left, T-14450-LFT]	MDC_MUSC_LOEXT_GLUT_MIN_L	805
Muscle   Gluteus, Minimus, Right   LowerExtremity   Body	Musculus gluteus minimus, Right [Gluteus minimus muscle, Right, T-14450-RGT]	MDC_MUSC_LOEXT_GLUT_MIN_R	806
Muscle   Tensor, Fasciae, Latae, NOS   LowerExtremity   Body	Musculus tensor fasciae latae [Tensor fasciae latae muscle, T-14451]	MDC_MUSC_LOEXT_TENSOR_FASC_LAT	808
Muscle   Tensor, Fasciae, Latae, Left   LowerExtremity   Body	Musculus tensor fasciae latae, Left [Tensor fasciae latae muscle, Left, T-14451-LFT]	MDC_MUSC_LOEXT_TENSOR_FASC_LAT_L	809
Muscle   Tensor, Fasciae, Latae, Right   LowerExtremity   Body	Musculus tensor fasciae latae, Right [Tensor fasciae latae muscle, Right, T-14451-RGT]	MDC_MUSC_LOEXT_TENSOR_FASC_LAT_R	810
Muscle   Piriformis, NOS   LowerExtremity   Body	Musculus piriformis [Piriform muscle, T-14460]	MDC_MUSC_LOEXT_PIRIFORM	812
Muscle   Piriformis, Left   LowerExtremity   Body	Musculus piriformis, Left [Piriform muscle, Left, T-14460-LFT]	MDC_MUSC_LOEXT_PIRIFORM_L	813
Muscle   Piriformis, Right   LowerExtremity   Body	Musculus piriformis, Right [Piriform muscle, Right, T-14460-RGT]	MDC_MUSC_LOEXT_PIRIFORM_R	814
Muscle   Obturator, NOS   LowerExtremity   Body	Musculus obturator [Obturator muscle, NOS, T-14420]	MDC_MUSC_LOEXT_OBTURATOR	816
Muscle   Obturator, Left   LowerExtremity   Body	Musculus obturator, Left [Obturator muscle, NOS, Left, T-14420-LFT]	MDC_MUSC_LOEXT_OBTURATOR_L	817
Muscle   Obturator, Right   LowerExtremity   Body	Musculus obturator, Right [Obturator muscle, NOS, Right, T-14420-RGT]	MDC_MUSC_LOEXT_OBTURATOR_R	818

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Gemellus, NOS   LowerExtremity   Body	Musculus gemellus [Gemellus muscle, NOS, T-14470]	MDC_MUSC_LOEXT_GEMEL	820
Muscle   Gemellus, Left   LowerExtremity   Body	Musculus gemellus, Left [Gemellus muscle, NOS, Left, T-14470-LFT]	MDC_MUSC_LOEXT_GEMEL_L	821
Muscle   Gemellus, Right   LowerExtremity   Body	Musculus gemellus, Right [Gemellus muscle, NOS, Right, T-14470-RGT]	MDC_MUSC_LOEXT_GEMEL_R	822
Muscle   Quadratus, Femoris, NOS   LowerExtremity   Body	Musculus quadratus femoris [Quadratus femoris muscle, T-14480]	MDC_MUSC_LOEXT_QUADRAT_FEMOR	824
Muscle   Quadratus, Femoris, Left   LowerExtremity   Body	Musculus quadratus femoris, Left [Quadratus femoris muscle, Left, T-14480-LFT]	MDC_MUSC_LOEXT_QUADRAT_FEMOR_L	825
Muscle   Quadratus, Femoris, Right   LowerExtremity   Body	Musculus quadratus femoris, Right [Quadratus femoris muscle, Right, T-14480-RGT]	MDC_MUSC_LOEXT_QUADRAT_FEMOR_R	826
Muscle   Sartorius, NOS   LowerExtremity   Body	Musculus sartorius [Sartorius muscle, T-14490]	MDC_MUSC_LOEXT_SARTOR	828
Muscle   Sartorius, Left   LowerExtremity   Body	Musculus sartorius, Left [Sartorius muscle, Left, T-14490-LFT]	MDC_MUSC_LOEXT_SARTOR_L	829
Muscle   Sartorius, Right   LowerExtremity   Body	Musculus sartorius, Right [Sartorius muscle, Right, T-14490-RGT]	MDC_MUSC_LOEXT_SARTOR_R	830
Muscle   Quadriceps, Femoris, NOS   LowerExtremity   Body	Musculus quadriceps femoris [Quadriceps femoris muscle, T-14550]	MDC_MUSC_LOEXT_QUADRICEPS_FEMOR	832
Muscle   Quadriceps, Femoris, Left   LowerExtremity   Body	Musculus quadriceps femoris, Left [Quadriceps femoris muscle, Left, T-14550-LFT]	MDC_MUSC_LOEXT_QUADRICEPS_FEMOR_L	833
Muscle   Quadriceps, Femoris, Right   LowerExtremity   Body	Musculus quadriceps femoris, Right [Quadriceps femoris muscle, Right, T-14550-RGT]	MDC_MUSC_LOEXT_QUADRICEPS_FEMOR_R	834
Muscle   Rectus, Femoris, NOS   LowerExtremity   Body	Musculus rectus femoris [Rectus femoris muscle, T-14560]	MDC_MUSC_LOEXT_RECT_FEMOR	836
Muscle   Rectus, Femoris, Left   LowerExtremity   Body	Musculus rectus femoris, Left [Rectus femoris muscle, Left, T-14560-LFT]	MDC_MUSC_LOEXT_RECT_FEMOR_L	837

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Rectus, Femoris, Right   LowerExtremity   Body	Musculus rectus femoris, Right [Rectus femoris muscle, Right, T-14560-RGT]	MDC_MUSC_LOEXT_RECT_FEMOR_R	838
Muscle   Vastus, Lateralis, NOS   LowerExtremity   Body	Musculus vastus lateralis [Vastus lateralis muscle, T-14570]	MDC_MUSC_LOEXT_VAST_LAT	840
Muscle   Vastus, Lateralis, Left   LowerExtremity   Body	Musculus vastus lateralis, Left [Vastus lateralis muscle, Left, T-14570-LFT]	MDC_MUSC_LOEXT_VAST_LAT_L	841
Muscle   Vastus, Lateralis, Right   LowerExtremity   Body	Musculus vastus lateralis, Right [Vastus lateralis muscle, Right, T-14570-RGT]	MDC_MUSC_LOEXT_VAST_LAT_R	842
Muscle   Vastus, Intermedius, NOS   LowerExtremity   Body	Musculus vastus intermedius [Vastus intermedius muscle, T-14620]	MDC_MUSC_LOEXT_VAST_INTERMED	844
Muscle   Vastus, Intermedius, Left   LowerExtremity   Body	Musculus vastus intermedius, Left [Vastus intermedius muscle, Left, T-14620-LFT]	MDC_MUSC_LOEXT_VAST_INTERMED_L	845
Muscle   Vastus, Intermedius, Right   LowerExtremity   Body	Musculus vastus intermedius, Right [Vastus intermedius muscle, Right, T-14620-RGT]	MDC_MUSC_LOEXT_VAST_INTERMED_R	846
Muscle   Vastus, Medialis, NOS   LowerExtremity   Body	Musculus vastus medialis [Vastus medialis muscle, T-14580]	MDC_MUSC_LOEXT_VAST_MED	848
Muscle   Vastus, Medialis, Left   LowerExtremity   Body	Musculus vastus medialis, Left [Vastus medialis muscle, Left, T-14580-LFT]	MDC_MUSC_LOEXT_VAST_MED_L	849
Muscle   Vastus, Medialis, Right   LowerExtremity   Body	Musculus vastus medialis, Right [Vastus medialis muscle, Right, T-14580-RGT]	MDC_MUSC_LOEXT_VAST_MED_R	850
Muscle   Pectineus, NOS   LowerExtremity   Body	Musculus pectineus [Pectineus muscle, T-14610]	MDC_MUSC_LOEXT_PECTIN	852
Muscle   Pectineus, Left   LowerExtremity   Body	Musculus pectineus, Left [Pectineus muscle, Left, T-14610-LFT]	MDC_MUSC_LOEXT_PECTIN_L	853
Muscle   Pectineus, Right   LowerExtremity   Body	Musculus pectineus, Right [Pectineus muscle, Right, T-14610-RGT]	MDC_MUSC_LOEXT_PECTIN_R	854
Muscle   Adductor, Longus, NOS   LowerExtremity   Body	Musculus adductor longus [Adductor longus muscle, T-14520]	MDC_MUSC_LOEXT_ABDUC_LONG	856

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Adductor, Longus, Left   LowerExtremity   Body	Musculus adductor longus, Left [Adductor longus muscle, Left, T-14520-LFT]	MDC_MUSC_LOEXT_ABDUC_LONG_L	857
Muscle   Adductor, Longus, Right   LowerExtremity   Body	Musculus adductor longus, Right [Adductor longus muscle, T-14520]	MDC_MUSC_LOEXT_ABDUC_LONG_R	858
Muscle   Adductor, Brevis, NOS   LowerExtremity   Body	Musculus adductor brevis [Adductor brevis muscle, T-14510]	MDC_MUSC_LOEXT_ABDUC_BREV	860
Muscle   Adductor, Brevis, Left   LowerExtremity   Body	Musculus adductor brevis, Left [Adductor brevis muscle, Left, T-14510-LFT]	MDC_MUSC_LOEXT_ABDUC_BREV_L	861
Muscle   Adductor, Brevis, Right   LowerExtremity   Body	Musculus adductor brevis, Right [Adductor brevis muscle, T-14510]	MDC_MUSC_LOEXT_ABDUC_BREV_R	862
Muscle   Adductor, Magnus, NOS   LowerExtremity   Body	Musculus adductor magnus [Adductor magnus muscle, T-14530]	MDC_MUSC_LOEXT_ABDUC_MAGN	864
Muscle   Adductor, Magnus, Left   LowerExtremity   Body	Musculus adductor magnus, Left [Adductor magnus muscle, Left, T-14530-LFT]	MDC_MUSC_LOEXT_ABDUC_MAGN_L	865
Muscle   Adductor, Magnus, Right   LowerExtremity   Body	Musculus adductor magnus, Right [Adductor magnus muscle, T-14530]	MDC_MUSC_LOEXT_ABDUC_MAGN_R	866
Muscle   Gracilis, NOS   LowerExtremity   Body	Musculus gracilis [Gracilis muscle, T-14540]	MDC_MUSC_LOEXT_GRACIL	868
Muscle   Gracilis, Left   LowerExtremity   Body	Musculus gracilis, Left [Gracilis muscle, Left, T-14540-LFT]	MDC_MUSC_LOEXT_GRACIL_L	869
Muscle   Gracilis, Right   LowerExtremity   Body	Musculus gracilis, Right [Gracilis muscle, T-14540]	MDC_MUSC_LOEXT_GRACIL_R	870
Muscle   Biceps, Femoris, NOS   LowerExtremity   Body	Musculus biceps femoris [Biceps femoris muscle, T-14630]	MDC_MUSC_LOEXT_BICEPS_FEMOR	872
Muscle   Biceps, Femoris, Left   LowerExtremity   Body	Musculus biceps femoris, Left [Biceps femoris muscle, Left, T-14630-LFT]	MDC_MUSC_LOEXT_BICEPS_FEMOR_L	873
Muscle   Biceps, Femoris, Right   LowerExtremity   Body	Musculus biceps femoris, Right [Biceps femoris muscle, T-14630]	MDC_MUSC_LOEXT_BICEPS_FEMOR_R	874

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Biceps, Femoris, Caput, Longum, NOS   LowerExtremity   Body	Musculus biceps femoris Caput longum [Biceps femoris muscle, long head, T-14631]	MDC_MUSC_LOEXT_BICEPS_FEMOR_LONG	876
Muscle   Biceps, Femoris, Caput, Longum, Left   LowerExtremity   Body	Musculus biceps femoris Caput longum, Left [Biceps femoris muscle, long head, Left, T-14631-LFT]	MDC_MUSC_LOEXT_BICEPS_FEMOR_LONG_L	877
Muscle   Biceps, Femoris, Caput, Longum, Right   LowerExtremity   Body	Musculus biceps femoris Caput longum, Right [Biceps femoris muscle, long head, Right, T-14631-RGT]	MDC_MUSC_LOEXT_BICEPS_FEMOR_LONG_R	878
Muscle   Biceps, Femoris, Caput, Brevis, NOS   LowerExtremity   Body	Musculus biceps femoris Caput breve [Biceps femoris muscle, short head, T-14632]	MDC_MUSC_LOEXT_BICEPS_FEMOR_BREV	880
Muscle   Biceps, Femoris, Caput, Brevis, Left   LowerExtremity   Body	Musculus biceps femoris Caput breve, Left [Biceps femoris muscle, short head, Left, T-14632-LFT]	MDC_MUSC_LOEXT_BICEPS_FEMOR_BREV_L	881
Muscle   Biceps, Femoris, Caput, Brevis, Right   LowerExtremity   Body	Musculus biceps femoris Caput breve, Right [Biceps femoris muscle, short head, Right, T-14632-RGT]	MDC_MUSC_LOEXT_BICEPS_FEMOR_BREV_R	882
Muscle   Semitendinosus, NOS   LowerExtremity   Body	Musculus semitendinosus [Semitendinosus muscle, T-14650]	MDC_MUSC_LOEXT_SEMITENDIN	884
Muscle   Semitendinosus, Left   LowerExtremity   Body	Musculus semitendinosus, Left [Semitendinosus muscle, Left, T-14650-LFT]	MDC_MUSC_LOEXT_SEMITENDIN_L	885
Muscle   Semitendinosus, Right   LowerExtremity   Body	Musculus semitendinosus, Right [Semitendinosus muscle, Right, T-14650-RGT]	MDC_MUSC_LOEXT_SEMITENDIN_R	886
Muscle   Semimembranosus, NOS   LowerExtremity   Body	Musculus semimembranosus [Semimembranosus muscle, T-14640]	MDC_MUSC_LOEXT_SEMIMEMBRAN	888
Muscle   Semimembranosus, Left   LowerExtremity   Body	Musculus semimembranosus, Left [Semimembranosus muscle, Left, T-14640-LFT]	MDC_MUSC_LOEXT_SEMIMEMBRAN_L	889
Muscle   Semimembranosus, Right   LowerExtremity   Body	Musculus semimembranosus, Right [Semimembranosus muscle, Right, T-14640-RGT]	MDC_MUSC_LOEXT_SEMIMEMBRAN_R	890
Muscle   Tibialis, Anterior, NOS   LowerExtremity   Body	Musculus tibialis anterior [Tibialis anterior muscle, T-14760]	MDC_MUSC_LOEXT_TIBIAL_ANT	892
Muscle   Tibialis, Anterior, Left   LowerExtremity   Body	Musculus tibialis anterior, Left [Tibialis anterior muscle, Left, T-14760-LFT]	MDC_MUSC_LOEXT_TIBIAL_ANT_L	893

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Tibialis, Anterior, Right   LowerExtremity   Body	Musculus tibialis anterior, Right [Tibialis anterior muscle, Right, T-14760-RGT]	MDC_MUSC_LOEXT_TIBIAL_ANT_R	894
Muscle   Extensor, Digitorum, Longus, NOS   LowerExtremity   Body	Musculus extensor digitorum longus [Extensor digitorum longus muscle, T-14780]	MDC_MUSC_LOEXT_EXTENS_DIGIT_LONG	896
Muscle   Extensor, Digitorum, Longus, Left   LowerExtremity   Body	Musculus extensor digitorum longus, Left [Extensor digitorum longus muscle, Left, T-14780-LFT]	MDC_MUSC_LOEXT_EXTENS_DIGIT_LONG_L	897
Muscle   Extensor, Digitorum, Longus, Right   LowerExtremity   Body	Musculus extensor digitorum longus, Right [Extensor digitorum longus muscle, Right, T-14780-RGT]	MDC_MUSC_LOEXT_EXTENS_DIGIT_LONG_R	898
Muscle   Extensor, Hallucis, Longus, NOS   LowerExtremity, Leg   Body	Musculus extensor hallucis longus [Extensor hallucis longus muscle, T-14790]	MDC_MUSC_LOEXT_EXTENS_HALLUC_LONG	900
Muscle   Extensor, Hallucis, Longus, Left   LowerExtremity, Leg   Body	Musculus extensor hallucis longus, Left [Extensor hallucis longus muscle, Left, T-14790-LFT]	MDC_MUSC_LOEXT_EXTENS_HALLUC_LONG_L	901
Muscle   Extensor, Hallucis, Longus, Right   LowerExtremity, Leg   Body	Musculus extensor hallucis longus, Right [Extensor hallucis longus muscle, Right, T-14790-RGT]	MDC_MUSC_LOEXT_EXTENS_HALLUC_LONG_R	902
Muscle   Peroneus, NOS   LowerExtremity   Body	[Peroneal muscle, NOS, T-14810]	MDC_MUSC_LOEXT_PERON	904
Muscle   Peroneus, Left   LowerExtremity   Body	[Peroneal muscle, NOS, Left, T-14810-LFT]	MDC_MUSC_LOEXT_PERON_L	905
Muscle   Peroneus, Right   LowerExtremity   Body	[Peroneal muscle, NOS, Right, T-14810-RGT]	MDC_MUSC_LOEXT_PERON_R	906
Muscle   Peroneus, Longus, NOS   LowerExtremity   Body	Musculus peroneus longus [Peroneus longus muscle, T-14811]	MDC_MUSC_LOEXT_PERON_LONG	908
Muscle   Peroneus, Longus, Left   LowerExtremity   Body	Musculus peroneus longus, Left [Peroneus longus muscle, Left, T-14811-LFT]	MDC_MUSC_LOEXT_PERON_LONG_L	909
Muscle   Peroneus, Longus, Right   LowerExtremity   Body	Musculus peroneus longus, Right [Peroneus longus muscle, Right, T-14811-RGT]	MDC_MUSC_LOEXT_PERON_LONG_R	910
Muscle   Peroneus, Brevis, NOS   LowerExtremity   Body	Musculus peroneus brevis [Peroneus brevis muscle, T-14812]	MDC_MUSC_LOEXT_PERON_BREV	912

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Peroneus, Brevis, Left   LowerExtremity   Body	Musculus peroneus brevis, Left [Peroneus brevis muscle, Left, T-14812-LFT]	MDC_MUSC_LOEXT_PERON_BREV_L	913
Muscle   Peroneus, Brevis, Right   LowerExtremity   Body	Musculus peroneus brevis, Right [Peroneus brevis muscle, Right, T-14812-RGT]	MDC_MUSC_LOEXT_PERON_BREV_R	914
Muscle   Triceps, Surae, NOS   LowerExtremity   Body	Musculotriceps surae [Triceps surae muscle, T-14720]	MDC_MUSC_LOEXT_TRICEPS_SUR	916
Muscle   Triceps, Surae, Left   LowerExtremity   Body	Musculotriceps surae, Left [Triceps surae muscle, Left, T-14720-LFT]	MDC_MUSC_LOEXT_TRICEPS_SUR_L	917
Muscle   Triceps, Surae, Right   LowerExtremity   Body	Musculotriceps surae, Right [Triceps surae muscle, Right, T-14720-RGT]	MDC_MUSC_LOEXT_TRICEPS_SUR_R	918
Muscle   Gastrocnemius, NOS   LowerExtremity   Body	Musculus gastrocnemius [Gastrocnemius muscle, T-14730]	MDC_MUSC_LOEXT_GASTROCNEM	920
Muscle   Gastrocnemius, Left   LowerExtremity   Body	Musculus gastrocnemius, Left [Gastrocnemius muscle, Left, T-14730-LFT]	MDC_MUSC_LOEXT_GASTROCNEM_L	921
Muscle   Gastrocnemius, Right   LowerExtremity   Body	Musculus gastrocnemius, Right [Gastrocnemius muscle, Right, T-14730-RGT]	MDC_MUSC_LOEXT_GASTROCNEM_R	922
Muscle   Gastrocnemius, Caput, Laterale, NOS   LowerExtremity   Body	Musculus gastrocnemius Caput laterale [Gastrocnemius muscle, lateral head, T-14731]	MDC_MUSC_LOEXT_GASTROCNEM_LAT	924
Muscle   Gastrocnemius, Caput, Laterale, Left   LowerExtremity   Body	Musculus gastrocnemius Caput laterale, Left [Gastrocnemius muscle, lateral head, Left, T-14731-LFT]	MDC_MUSC_LOEXT_GASTROCNEM_LAT_L	925
Muscle   Gastrocnemius, Caput, Laterale, Right   LowerExtremity   Body	Musculus gastrocnemius Caput laterale, Right [Gastrocnemius muscle, lateral head, Right, T-14731-RGT]	MDC_MUSC_LOEXT_GASTROCNEM_LAT_R	926
Muscle   Gastrocnemius, Caput, Mediale, NOS   LowerExtremity   Body	Musculus gastrocnemius Caput mediale [Gastrocnemius muscle, medial head, T-14732]	MDC_MUSC_LOEXT_GASTROCNEM_MED	928
Muscle   Gastrocnemius, Caput, Mediale, Left   LowerExtremity   Body	Musculus gastrocnemius Caput mediale, Left [Gastrocnemius muscle, medial head, Left, T-14732-LFT]	MDC_MUSC_LOEXT_GASTROCNEM_MED_L	929
Muscle   Gastrocnemius, Caput, Mediale, Right   LowerExtremity   Body	Musculus gastrocnemius Caput mediale, Right [Gastrocnemius muscle, medial head, Right, T-14732-RGT]	MDC_MUSC_LOEXT_GASTROCNEM_MED_R	930

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Soleus, NOS   LowerExtremity   Body	Musculus soleus [Soleus muscle, T-14740]	MDC_MUSC_LOEXT_SOL	932
Muscle   Soleus, Left   LowerExtremity   Body	Musculus soleus, Left [Soleus muscle, Left, T-14740-LFT]	MDC_MUSC_LOEXT_SOL_L	933
Muscle   Soleus, Right   LowerExtremity   Body	Musculus soleus, Right [Soleus muscle, Right, T-14740-RGT]	MDC_MUSC_LOEXT_SOL_R	934
Muscle   Plantaris, NOS   LowerExtremity   Body	Musculus plantaris [Plantaris muscle, T-14750]	MDC_MUSC_LOEXT_PLANTAR	936
Muscle   Plantaris, Left   LowerExtremity   Body	Musculus plantaris, Left [Plantaris muscle, Left, T-14750-LFT]	MDC_MUSC_LOEXT_PLANTAR_L	937
Muscle   Plantaris, Right   LowerExtremity   Body	Musculus plantaris, Right [Plantaris muscle, Right, T-14750-RGT]	MDC_MUSC_LOEXT_PLANTAR_R	938
Muscle   Popliteus, NOS   LowerExtremity   Body	Musculus popliteus [Popliteal muscle, T-14710]	MDC_MUSC_LOEXT_POPLIT	940
Muscle   Popliteus, Left   LowerExtremity   Body	Musculus popliteus, Left [Popliteal muscle, Left, T-14710-LFT]	MDC_MUSC_LOEXT_POPLIT_L	941
Muscle   Popliteus, Right   LowerExtremity   Body	Musculus popliteus, Right [Popliteal muscle, Right, T-14710-RGT]	MDC_MUSC_LOEXT_POPLIT_R	942
Muscle   Tibialis, Posterior, NOS   LowerExtremity   Body	Musculus tibialis posterior [Tibialis posterior muscle, T-14770]	MDC_MUSC_LOEXT_TIBIAL_POST	944
Muscle   Tibialis, Posterior, Left   LowerExtremity   Body	Musculus tibialis posterior, Left [Tibialis posterior muscle, Left, T-14770-LFT]	MDC_MUSC_LOEXT_TIBIAL_POST_L	945
Muscle   Tibialis, Posterior, Right   LowerExtremity   Body	Musculus tibialis posterior, Right [Tibialis posterior muscle, Right, T-14770-RGT]	MDC_MUSC_LOEXT_TIBIAL_POST_R	946
Muscle   Flexor, Digitorum, Longus, NOS   LowerExtremity   Body	Musculus flexor digitorum longus [Flexor digitorum longus muscle, T-14820]	MDC_MUSC_LOEXT_FLEX_DIGIT_LONG	948
Muscle   Flexor, Digitorum, Longus, Left   LowerExtremity   Body	Musculus flexor digitorum longus, Left [Flexor digitorum longus muscle, Left, T-14820-LFT]	MDC_MUSC_LOEXT_FLEX_DIGIT_LONG_L	949

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Flexor, Digitorum, Longus, Right   LowerExtremity   Body	Musculus flexor digitorum longus, Right [Flexor digitorum longus muscle, Right, T-14820-RGT]	MDC_MUSC_LOEXT_FLEX_DIGIT_LONG_R	950
Muscle   Extensor, Hallucis, Brevis, NOS   LowerExtremity, Leg   Body	Musculus extensor hallucis brevis [Extensor hallucis brevis muscle, T-14791]	MDC_MUSC_LOEXT_EXTENS_HALLUC_BREV	952
Muscle   Extensor, Hallucis, Brevis, Left   LowerExtremity, Leg   Body	Musculus extensor hallucis brevis, Left [Extensor hallucis brevis muscle, Left, T-14791-LFT]	MDC_MUSC_LOEXT_EXTENS_HALLUC_BREV_L	953
Muscle   Extensor, Hallucis, Brevis, Right   LowerExtremity, Leg   Body	Musculus extensor hallucis brevis, Right [Extensor hallucis brevis muscle, Right, T-14791-RGT]	MDC_MUSC_LOEXT_EXTENS_HALLUC_BREV_R	954
Muscle   Extensor, Digitorum, Brevis, NOS   LowerExtremity   Body	Musculus extensor digitorum brevis [Extensor digitorum brevis muscle, T-14781]	MDC_MUSC_LOEXT_EXTENS_DIGIT_BREV	956
Muscle   Extensor, Digitorum, Brevis, Left   LowerExtremity   Body	Musculus extensor digitorum brevis, Left [Extensor digitorum brevis muscle, Left, T-14781-LFT]	MDC_MUSC_LOEXT_EXTENS_DIGIT_BREV_L	957
Muscle   Extensor, Digitorum, Brevis, Right   LowerExtremity   Body	Musculus extensor digitorum brevis, Right [Extensor digitorum brevis muscle, Right, T-14781-RGT]	MDC_MUSC_LOEXT_EXTENS_DIGIT_BREV_R	958
Muscle   Abductor, Hallucis, NOS   LowerExtremity   Body	Musculus abductor hallucis [Abductor hallucis muscle, T-14990]	MDC_MUSC_LOEXT_ABDUC_HALLUC	960
Muscle   Abductor, Hallucis, Left   LowerExtremity   Body	Musculus abductor hallucis, Left [Abductor hallucis muscle, Left, T-14990-LFT]	MDC_MUSC_LOEXT_ABDUC_HALLUC_L	961
Muscle   Abductor, Hallucis, Right   LowerExtremity   Body	Musculus abductor hallucis, Right [Abductor hallucis muscle, Right, T-14990-RGT]	MDC_MUSC_LOEXT_ABDUC_HALLUC_R	962
Muscle   Flexor, Hallucis, Brevis, NOS   LowerExtremity   Body	Musculus flexor hallucis brevis [Flexor hallucis brevis muscle, T-14940]	MDC_MUSC_LOEXT_FLEX_HALLUC_BREV	964
Muscle   Flexor, Hallucis, Brevis, Left   LowerExtremity   Body	Musculus flexor hallucis brevis, Left [Flexor hallucis brevis muscle, Left, T-14940-LFT]	MDC_MUSC_LOEXT_FLEX_HALLUC_BREV_L	965
Muscle   Flexor, Hallucis, Brevis, Right   LowerExtremity   Body	Musculus flexor hallucis brevis, Right [Flexor hallucis brevis muscle, Right, T-14940-RGT]	MDC_MUSC_LOEXT_FLEX_HALLUC_BREV_R	966
Muscle   Adductor, Hallucis, NOS   LowerExtremity   Body	Musculus adductor hallucis [Adductor hallucis muscle, T-14950]	MDC_MUSC_LOEXT_ADDUC_HALLUC	968

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Adductor, Hallucis, Left   LowerExtremity   Body	Musculus adductor hallucis, Left [Adductor hallucis muscle, Left, T-14950-LFT]	MDC_MUSC_LOEXT_ADDUC_HALLUC_L	969
Muscle   Adductor, Hallucis, Right   LowerExtremity   Body	Musculus adductor hallucis [Adductor hallucis muscle, Right, T-14950-RGT]	MDC_MUSC_LOEXT_ADDUC_HALLUC_R	970
Muscle   Abductor, Digitii, Minimi, NOS   LowerExtremity   Body	Musculus abductor digiti minimi [Abductor digiti minimi muscle of foot, T-14910]	MDC_MUSC_LOEXT_ABDUC_DIGIT_MIN	972
Muscle   Abductor, Digitii, Minimi, Left   LowerExtremity   Body	Musculus abductor digiti minimi, Left [Abductor digiti minimi muscle of foot, Left, T-14910-LFT]	MDC_MUSC_LOEXT_ABDUC_DIGIT_MIN_L	973
Muscle   Abductor, Digitii, Minimi, Right   LowerExtremity   Body	Musculus abductor digiti minimi [Abductor digiti minimi muscle of foot, Right, T-14910-RGT]	MDC_MUSC_LOEXT_ABDUC_DIGIT_MIN_R	974
Muscle   Flexor, Digitii, Minimi, Brevis, NOS   LowerExtremity   Body	Musculus flexor digiti minimi brevis [Flexor digiti minimi brevis muscle of foot, T-14960]	MDC_MUSC_LOEXT_FLEX_DIGIT_BREV_MIN	976
Muscle   Flexor, Digitii, Minimi, Brevis, Left   LowerExtremity   Body	Musculus flexor digiti minimi brevis, Left [Flexor digiti minimi brevis muscle of foot, Left, T-14960-LFT]	MDC_MUSC_LOEXT_FLEX_DIGIT_BREV_MIN_L	977
Muscle   Flexor, Digitii, Minimi, Brevis, Right   LowerExtremity   Body	Musculus flexor digiti minimi brevis, Right [Flexor digiti minimi brevis muscle of foot, Right, T-14960-RGT]	MDC_MUSC_LOEXT_FLEX_DIGIT_BREV_MIN_R	978
Muscle   Quadratus, Plantae, NOS   LowerExtremity   Body	Musculus quadratus plantae [Quadratus plantae muscle, T-14920]	MDC_MUSC_LOEXT_QUADRAT_PLANT	980
Muscle   Quadratus, Plantae, Left   LowerExtremity   Body	Musculus quadratus plantae, Left [Quadratus plantae muscle, Left, T-14920-LFT]	MDC_MUSC_LOEXT_QUADRAT_PLANT_L	981
Muscle   Quadratus, Plantae, Right   LowerExtremity   Body	Musculus quadratus plantae, Right [Quadratus plantae muscle, Right, T-14920-RGT]	MDC_MUSC_LOEXT_QUADRAT_PLANT_R	982
Muscle   Lumbricales, NOS   LowerExtremity   Body	Musculi lumbricales [Lumbricales pedis muscle, T-14930]	MDC_MUSC_LOEXT_LUMBRICAL	984
Muscle   Lumbricales, Left   LowerExtremity   Body	Musculi lumbricales, Left [Lumbricales pedis muscle, Left, T-14930-LFT]	MDC_MUSC_LOEXT_LUMBRICAL_L	985
Muscle   Lumbricales, Right   LowerExtremity   Body	Musculi lumbricales, Right [Lumbricales pedis muscle, Right, T-14930-RGT]	MDC_MUSC_LOEXT_LUMBRICAL_R	986

**Table A.8.3.1—Nomenclature and codes for sites for neurophysiological signal monitoring: locations near or in muscles (continued)**

Systematic name	Description/Definition	Reference ID	Code
Muscle   Interossei, Dorsales, NOS   LowerExtremity   Body	Musculus interossei dorsales [Interosseous dorsales muscles, T-14980]	MDC_MUSC_LOEXT_INTEROSS_DORSAL	988
Muscle   Interossei, Dorsales, Left   LowerExtremity   Body	Musculus interossei dorsales, Left [Interosseous dorsales muscles, Left, T-14980-LFT]	MDC_MUSC_LOEXT_INTEROSS_DORSAL_L	989
Muscle   Interossei, Dorsales, Right   LowerExtremity   Body	Musculus interossei dorsales, Right [Interosseous dorsales muscles, Right, T-14980-RGT]	MDC_MUSC_LOEXT_INTEROSS_DORSAL_R	990
Muscle   Interossei, Plantares, NOS   LowerExtremity   Body	Musculus interossei plantares [Interosseous plantares muscles, T-14970]	MDC_MUSC_LOEXT_INTEROSS_PLANTAR	992
Muscle   Interossei, Plantares, Left   LowerExtremity   Body	Musculus interossei plantares, Left [Interosseous plantares muscles, Left, T-14970-LFT]	MDC_MUSC_LOEXT_INTEROSS_PLANTAR_L	993
Muscle   Interossei, Plantares, Right   LowerExtremity   Body	Musculus interossei plantares, Right [Interosseous plantares muscles, Right, T-14970-RGT]	MDC_MUSC_LOEXT_INTEROSS_PLANTAR_R	994

### CID 30zz EOG Leads

This Context Group comprises the EOG lead identifiers of ISO/IEEE 11073-10101. The terms included in the table below may not constitute the complete list; see the ISO/IEEE Standard.

#### Note

Codes reprinted by permission of IEEE, Copyright 2004 by IEEE. ISO/IEEE 11073-10101 available through <http://standards.ieee.org>.

**Resources:** <....>  
**Type:** Extensible  
**Version:** 20040624

UID:

<...>

Table CID 30zz EOG Leads

Coding Scheme	Code Value	Acronym	Code Meaning	ISO/IEEE 11073 MDC Equivalent Reference ID (Informative)
MDC	7:1320	E0	Electrode between the eyes, on the horizontal axis of the eyes.	MDC_EYE_AXIS_HORIZ
MDC	7:1325	EI1	Electrode above the center of the left eye.	MDC_EYE_CENT_ABOVE_L
MDC	7:1329	EI2	Electrode below the center of the left eye.	MDC_EYE_CENT_BELOW_L
MDC	7:1333	EI3	Electrode 1 cm above the left eye on the eyebrow, in the middle between the center point of the eye and the lateral canthus.	MDC_EYE_CANTH_LAT ABOVE_MID_L
MDC	7:1337	EI4	Electrode directly below the left eye, in the middle between the center point of the eye and the lateral canthus.	MDC_EYE_CANTH_LAT BELOW_MID_L
MDC	7:1341	EI5	Electrode slightly above the outer canthus of the left eye in the position suggested by the sleep stage scoring manual.	MDC_EYE_CANTH_OUTER ABOVE_L
MDC	7:1345	EI6	Electrode slightly below the outer canthus of the left eye in the position suggested by the sleep stage scoring manual.	MDC_EYE_CANTH_OUTER BELOW_L
MDC	7:1349	EI7	Electrode on the outer canthus of the left eye on the horizontal line through the center of the eyes.	MDC_EYE_CANTH_OUTER CENTER_L
MDC	7:1354	Er1	Electrode above the center of the right eye.	MDC_EYE_CENT ABOVE_R
MDC	7:1358	Er2	Electrode below the center of the right eye.	MDC_EYE_CENT BELOW_R
MDC	7:1362	Er3	Electrode 1 cm above the right eye on the eyebrow, in the middle between the center point of the eye and the lateral canthus.	MDC_EYE_CANTH_LAT ABOVE_R
MDC	7:1366	Er4	Electrode directly below the right eye, in the middle between the center point of the eye and the lateral canthus.	MDC_EYE_CANTH_LAT BELOW_R
MDC	7:1370	Er5	Electrode slightly above the outer canthus of the right eye in the position suggested by the sleep stage scoring manual.	MDC_EYE_CANTH_OUTER ABOVE_R
MDC	7:1374	Er6	Electrode slightly below the outer canthus of the right eye in the position suggested by the sleep stage scoring manual.	MDC_EYE_CANTH_OUTER BELOW_R
MDC	7:1378	Er7	Electrode on the outer canthus of the right eye on the horizontal line through the center of the eyes.	MDC_EYE_CANTH_OUTER CENTER_R
MDC	7:1381	EIL	Electrode or other sensor on the left eyelid.	MDC_EYE_EYELID_L
MDC	7:1386	ErL	Electrode or other sensor on the right eyelid.	MDC_EYE_EYELID_R

MDC	7:1389	Ela	Other electrode position near the left eye, above the horizontal axis of the eyes.	MDC_EYE ABOVE_L
MDC	7:1393	Elb	Other electrode position near the left eye, above the horizontal axis of the eyes.	MDC_EYE BELOW_L
MDC	7:1398	Era	Other electrode position near the right eye, above the horizontal axis of the eyes.	MDC_EYE ABOVE_R
MDC	7:1402	Erb	Other electrode position near the right eye, below the horizontal axis of the eyes.	MDC_EYE BELOW_R

**CID 34xx EEG Annotations**

**CID 34yy EMG Annotations**

**CID 34zz EOG Annotations**

ISO/IEEE 11073 – 10101 contains

- nomenclature, data dictionary, and codes for neurological monitoring measurements (Table A.7.8.1)
- nomenclature, data dictionary, and codes for neurophysiologic enumerations (Table A.7.9.1)
- nomenclature and codes for neurophysiologic stimulation modes (Table A.7.10.1)
- nomenclature, data dictionary, and codes for alerts, which can be used as systematic names for physiologic monitoring, providing both:
  - Diagnostic pattern events: holds systematic names concerning patient-oriented events that are derived from physiologic signals, e.g., ECG, EEG. These events are triggered if specific diagnostic patterns are observed in the physiologic signal. (Table A.9.2.1)
  - Device oriented events, like Error Events, Limit Events, Synchronization Event, Advisory (Table A.9.3.1)

The following provides copies of code lists in ISO/IEEE 11073 – 10101. Their use is strictly limited to the standardization work within DICOM WG 32.

**Table A.7.8.1—Nomenclature and codes for neurological monitoring measurements**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Circumference   Head   Body, CNS	Circum head		Circumference of the head	MDC_CIRCUM_HEAD	22784
Compliance   Head, Intracranial   CNS	Intracranial compliance		Change of volume per unit change of intracranial pressure. Measurement is carried out by measuring the change of intracranial pressure following the drainage of a defined small amount of cerebrospinal fluid or filling a balloon positioned inside skull with a small amount of air or water.	MDC_COMPL_INTRA_CRAN	22788
Diameter   Pupil   CNS	Pupil diameter		Diameter of the pupil	MDC_DIAM_PUPIL	22792
Diameter   Pupil, LeftEye   CNS	Pupil diameter left eye		Diameter of the pupil, left eye	MDC_DIAM_PUPIL_LEFT	22796
Diameter   Pupil, RightEye   CNS	Pupil diameter right eye		Diameter of the pupil, right eye	MDC_DIAM_PUPIL_RIGHT	22800
Duration   BERA, InterPeak, Wave1Wave3   BrainStem   CNS	Interpeak latency Wave 1 to Wave 3 in brainstem evoked potential		Time interval between crest of Wave 1 and crest of Wave 3 in brainstem acoustical evoked potential	MDC_TIME_PD_BERA_INTERPK_WV_1_TO_3	22804
Duration   BERA, InterPeak, Wave1Wave5   BrainStem   CNS	Interpeak latency Wave 1 to Wave 5 in brainstem evoked potential		Time interval between crest of Wave 1 and crest of Wave 5 in brainstem acoustical evoked potential	MDC_TIME_PD_BERA_INTERPK_WV_1_TO_5	22808
Duration   BERA, InterPeak, Wave3Wave5   BrainStem   CNS	Interpeak latency Wave 3 to Wave 5 in brainstem evoked potential		Time interval between crest of Wave 3 and crest of Wave 5 in brainstem acoustical evoked potential	MDC_TIME_PD_BERA_INTERPK_WV_3_TO_5	22812
Duration   ReactionTime   Pupil   CNS			Reaction of pupils to light	MDC_TIME_PD_PUPIL_REACT	22816
Duration   ReactionTime   Pupil, LeftEye   CNS			Reaction of pupils to light, left eye	MDC_TIME_PD_PUPIL_REACT_LEFT	22820
Duration   ReactionTime   Pupil, RightEye   CNS			Reaction of pupils to light, right eye	MDC_TIME_PD_PUPIL_REACT_RIGHT	22824

**Table A.7.8.1—Nomenclature and codes for neurological monitoring measurements (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
ElectricalPotential   Cortex   CNS	Electro-encephalogram	EEG	Electrical potential derived bipolarly between two electrodes, Position 1 and Position 2 at head surface. A list attribute is used. The electrode at Position 1 is Number 1 in the list. Position 2 can be a combined reference, e.g., linked ear. All connected electrode sites are listed beginning with Number 2 in the list. The attribute values must be taken from the Table A.8.4.1.	MDC_EEG_ELEC_POTL_CRTX	22828
ElectricalPotential   Eye   CNS	Electro-oculogram	EOG	Electrical potential derived bipolarly from electrode positions 1 and 2 in the neighborhood of eye. A list attribute is used. The attribute values must be taken from the Table A.8.5.1.	MDC_EOG_ELEC_POTL_EYE	22832
ElectricalPotential   Eye, Nystagmus   CNS	Electro-nystagmogram		Electrical potential of the eye derived differentially by electrode on Position 1 and Position 2. A list attribute is used. The attribute values must be taken from the Table A.8.5.1.	MDC_ENG_ELEC_POTL_EYE_NYSTAG	22836
ElectricalPotential   Eye, Retina   CNS	Electro-retinogram	ERG	Electrical potential of the eye derived bipolarly between electrodes placed on bulbus	MDC_ERG_ELEC_POTL_RETINA	22840
ElectricalPotential   Muscle   MuscularSystem	Electromyogram	EMG	Electrical Potential from muscle derived bipolarly between electrode Position 1 and Position 2 on skin surface or inside muscle. A list attribute is used. The attribute values must be taken from the Table A.8.3.1.	MDC_EMG_ELEC_POTL_MUSC	22844
ElectricalPotential   BERA, Wave1, Amplitude   BrainStem   CNS	Amplitude Wave 1 brainstem evoked potential		Potential difference between crest and valley before or after crest of Wave 1 in brainstem acoustical evoked potential	MDC_ELEC_EVOK_POTL_BERA_AMPL_WV_1	22848
ElectricalPotential   BERA, Wave2, Amplitude   BrainStem   CNS	Amplitude Wave 2 brainstem evoked potential		Potential difference between crest and valley before or after crest of Wave 2 in brainstem acoustical evoked potential	MDC_ELEC_EVOK_POTL_BERA_AMPL_WV_2	22852
ElectricalPotential   BERA, Wave3, Amplitude   BrainStem   CNS	Amplitude Wave 3 brainstem evoked potential		Potential difference between crest and valley before or after crest of Wave 3 in brainstem acoustical evoked potential	MDC_ELEC_POTL_BERA_AMPL_WV_3	22856

**Table A.7.8.1—Nomenclature and codes for neurological monitoring measurements (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
ElectricalPotential   BERA, Wave4, Amplitude   BrainStem   CNS	Amplitude Wave 4 brainstem evoked potential		Potential difference between crest and valley before or after crest of Wave 4 in brainstem acoustical evoked potential (comment: a list attribute is used for describing measurement and stimulation; values possible: left, right, NOS.)	MDC_ELEC_POTL_BERA_AMPL_WV_4	22860
ElectricalPotential   BERA, Wave5, Amplitude   BrainStem   CNS	Amplitude Wave 5 brainstem evoked potential		Potential difference between crest and valley before or after crest of Wave 5 in brainstem acoustical evoked potential	MDC_ELEC_POTL_BERA_AMPL_WV_5	22864
ElectricalPotential   Evoked   Cortex   CNS	Evoked potential	EVP	Electrical potential, response to stimulation and mostly averaging, not specified	MDC_ELEC_EVOK_POTL_CRTX	22868
ElectricalPotential   Evoked, Acoustic   BrainStem   CNS	Brainstem acoustical evoked potential	BERA	Electrical potential, response to acoustical stimulus, method averaging, early potentials	MDC_ELEC_EVOK_POTL_BSTEM_ACOUSTIC	22872
ElectricalPotential   Evoked, Acoustic   Cortex   CNS	Acoustical evoked potential	AEP	Electrical potential, response to acoustical stimulus, method averaging, medium and late potentials	MDC_ELEC_EVOK_POTL_CRTX_ACOUSTIC	22876
ElectricalPotential   Evoked, Magnetic   Cortex   CNS	Magnetic evoked potential		Electrical potential, response to magnetic stimulus	MDC_ELEC_EVOK_POTL_CRTX_MAG	22880
ElectricalPotential   Evoked, Motoric   Cortex   CNS	Motoric evoked potential	MEP	Electrical potential, response to magnetic stimulus, method averaging; measured between electrode Position 1 and Position 2 on skin surface or inside muscle. A list attribute is used. The attribute values must be taken from the Table A.8.3.1.	MDC_ELEC_EVOK_POTL_CRTX_MOTOR	22884
ElectricalPotential   Evoked, Somatosensory   Cortex   CNS	Somatosensory evoked potential	SEP	Electrical potential, response to electrical stimulation and averaging. See also A.8.4.	MDC_ELEC_EVOK_POTL_CRTX_SOMATOSENS	22888
ElectricalPotential   Evoked, Visual   Cortex   CNS	Visual evoked potential	VEP	Electrical potential, response to visual stimulus, method averaging	MDC_ELEC_EVOK_POTL_CRTX_VIS	22892
ElectricalPotential   InsideSkull   Cortex   CNS	Electro-corticogram	ECoG	Electrical potential derived bipolarly between two electrodes, Position 1 and Position 2 (attribute, textual) on cortex. Lead 2 can be a combined reference, e.g., linked ear. No standard lead system is known so far.	MDC_ELEC_POTL_CRTX_INSKULL	22896

**Table A.7.8.1—Nomenclature and codes for neurological monitoring measurements (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
ElectricalPotential   VEP, P100Amplitude   Cortex   CNS	Amplitude Wave P100 in visual evoked potential		Potential difference between crest and valley before or after crest of Wave P100 in visual evoked potential (comment: a list attribute is used for describing measurement and stimulation; values possible: left, right, NOS.)	MDC_ELEC_POTL_CRTX_AMPL_P100	22900
Flow   Blood, Cerebral   CNS	Cerebral blood flow		Transcranial cerebral blood flow	MDC_FLOW_BLD_CEREB	22904
Frequency   EEG, PowerSpectrum, MeanDominantFrequency   Cortex   CNS	Mean dominant frequency of electro-encephalogram		Mean dominant frequency of Power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. See also A.8.4.	MDC_EEG_FREQ_PWR_SPEC_CRTX_DOM_MEAN	22908
Frequency   EEG, PowerSpectrum, MedianPowerFrequency   Cortex   CNS	Median power frequency of electro-encephalogram		Median power frequency of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. See also A.8.4.	MDC_EEG_FREQ_PWR_SPEC_CRTX_MEDIAN	22912
Frequency   EEG, PowerSpectrum, PeakPowerFrequency   Cortex   CNS	Peak power frequency of electro-encephalogram		Peak power frequency of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. See also A.8.4.	MDC_EEG_FREQ_PWR_SPEC_CRTX_PEAK	22916
Frequency   EEG, PowerSpectrum, SpectralEdgeFrequency   Cortex   CNS	Spectral edge frequency of electro-encephalogram		Spectral edge frequency of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. See also A.8.4.	MDC_EEG_FREQ_PWR_SPEC_CRTX_SPECTRAL_EDGE	22920
Latency   BERA, Wave1   BrainStem   CNS	Latency Wave 1 brainstem evoked potential		Time interval between stimulus and crest of Wave 1 in brainstem acoustical evoked potential	MDC_LATENCY_BSTEM_EVOK_POTL_WV_1	22924
Latency   BERA, Wave2   BrainStem   CNS	Latency Wave 2 brainstem evoked potential		Time interval between stimulus and crest of Wave 2 in brainstem acoustical evoked potential	MDC_LATENCY_BSTEM_EVOK_POTL_WV_2	22928
Latency   BERA, Wave3   BrainStem   CNS	Latency Wave 3 brainstem evoked potential		Time interval between stimulus and crest of Wave 3 in brainstem acoustical evoked potential	MDC_LATENCY_BSTEM_EVOK_POTL_WV_3	22932

**Table A.7.8.1—Nomenclature and codes for neurological monitoring measurements (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Latency   BERA, Wave4   BrainStem   CNS	Latency Wave 4 brainstem evoked potential		Time interval between stimulus and crest of Wave 4 in brainstem acoustical evoked potential	MDC_LATENCY_BSTEM_EVOK_POTL_WV_4	22936
Latency   BERA, Wave5   BrainStem   CNS	Latency Wave 5 brainstem evoked potential		Time interval between stimulus and crest of Wave 5 in brainstem acoustical evoked potential	MDC_LATENCY_BSTEM_EVOK_POTL_WV_5	22940
Latency   VEP, P100   Cortex   CNS	Latency Wave P100 in visual evoked potential		Time interval between stimulus and crest of Wave P100 in visual evoked potential	MDC_LATENCY_VEP_WV_P100	22944
MagneticField   Cortex   CNS	Magneto-encephalogram	MEG	Magnetic field measured above surface of head, representing neurogenic activity in brain	MDC_MEG_MAGFLD	22948
Number   EEG   Arousal   Neurology, CNS	Arousal		Arousal, short awakenings, as determined out of the EEG, EOG, and EMG	MDC_EEG_NUM_AROUS	22952
Number   EEG   Spikes   Neurology, CNS	Spikes		Spikes, as determined out of the EEG	MDC_EEG_NUM_SPK	22956
Number   EEG   Seizures   Neurology, CNS	Seizures		Seizures, as determined out of the EEG, EOG, and EMG	MDC_EEG_NUM_SEIZ	22960
Power   EEG, PowerSpectrum   Cortex   CNS	Compressed spectral array of electro-encephalogram	CSA	Power spectrum of EEG measured between two electrodes, position 1 and 2 at head surface. A list attribute is used. See also A.8.4.	MDC_EEG_PWR_SPEC_CSA	22964
Power   EEG, PowerSpectrum, TotalPower   Cortex   CNS	Total power of electro-encephalogram		Total power of spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. A list attribute is used. See also A.8.4.	MDC_EEG_PWR_SPEC_TOT	22968
Power   EEG, PowerSpectrum, AlphaBand, AbsolutePower   Cortex   CNS	Absolute power of alpha band of electro-encephalogram		Absolute power of alpha band of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. A list attribute is used. See also A.8.4.	MDC_EEG_PWR_SPEC_ALPHA_ABS	22972
Power   EEG, PowerSpectrum, BetaBand, AbsolutePower   Cortex   CNS	Absolute power of beta band of electro-encephalogram		Absolute power of beta band of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. A list attribute is used. See also A.8.4.	MDC_EEG_PWR_SPEC_BETA_ABS	22976

**Table A.7.8.1—Nomenclature and codes for neurological monitoring measurements (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Power   EEG, PowerSpectrum, DeltaBand, AbsolutePower   Cortex   CNS	Absolute power of delta band of electro-encephalogram		Absolute power of delta band of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. A list attribute is used. See also A.8.4.	MDC_EEG_PWR_SPEC_DELTA_ABS	22980
Power   EEG, PowerSpectrum, ThetaBand, AbsolutePower   Cortex   CNS	Absolute power of theta band of electro-encephalogram		Absolute power of theta band of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. A list attribute is used. See also A.8.4.	MDC_EEG_PWR_SPEC_THETA_ABS	22984
Power   EEG, PowerSpectrum, SigmaBand, AbsolutePower   Cortex   CNS	Absolute power of sigma band of electro-encephalogram		Absolute power of sigma band of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. A list attribute is used. See also A.8.4.	MDC_EEG_PWR_SPEC_SIGMA_ABS	22988
Power   EEG, PowerSpectrum, GammaBand, AbsolutePower   Cortex   CNS	Absolute power of gamma band of electro-encephalogram		Absolute power of gamma band of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. A list attribute is used. See also A.8.4.	MDC_EEG_PWR_SPEC_GAMMA_ABS	22992
Power   EEG, PowerSpectrum, AlphaBand, RelativePower   Cortex   CNS	Relative power of alpha band of electro-encephalogram		Relative power of alpha band of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. A list attribute is used. See also A.8.4.	MDC_EEG_PWR_SPEC_ALPHA_REL	22996
Power   EEG, PowerSpectrum, BetaBand, RelativePower   Cortex   CNS	Relative power of beta band of electro-encephalogram		Relative power of beta band of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. A list attribute is used. See also A.8.4.	MDC_EEG_PWR_SPEC_BETA_REL	23000
Power   EEG, PowerSpectrum, DeltaBand, RelativePower   Cortex   CNS	Relative power of delta band of electro-encephalogram		Relative power of delta band of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. A list attribute is used. See also A.8.4.	MDC_EEG_PWR_SPEC_DELTA_REL	23004
Power   EEG, PowerSpectrum, ThetaBand, RelativePower   Cortex   CNS	Relative power of theta band of electro-encephalogram		Relative power of theta band of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. A list attribute is used. See also A.8.4.	MDC_EEG_PWR_SPEC_THETA_REL	23008

**Table A.7.8.1—Nomenclature and codes for neurological monitoring measurements (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Power   EEG, PowerSpectrum, SigmaBand, RelativePower   Cortex   CNS	Relative power of sigma band of electro-encephalogram		Relative power of sigma band of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. A list attribute is used. See also A.8.4.	MDC_EEG_PWR_SPEC_SIGMA_REL	23012
Power   EEG, PowerSpectrum, GammaBand, RelativePower   Cortex   CNS	Relative power of gamma band of electro-encephalogram		Relative power of gamma band of power spectrum of EEG measured between two electrodes, Position 1 and Position 2 at head surface. A list attribute is used. See also A.8.4.	MDC_EEG_PWR_SPEC_GAMMA_REL	23016
Pressure   Head, Intracranial   CNS	Intracranial pressure	ICP	Pressure inside skull	MDC_PRESS_INTRA_CRAN	22536
Pressure   Mean   Head, Intracranial   CNS	Mean intracranial pressure	ICPM	Mean pressure inside skull	MDC_PRESS_INTRA_CRAN_MEAN	22539
Pressure   Systolic   Head, Intracranial   CNS	Systolic intracranial pressure	ICPS	Maximum pressure inside skull, caused by filling of vessels during systolic phase of blood pressure	MDC_PRESS_INTRA_CRAN_SYS	22537
Pressure   Diastolic   Head, Intracranial   CNS	Diastolic intracranial pressure	ICPD	Minimum pressure inside skull, caused by emptying of vessels during diastolic phase of blood pressure	MDC_PRESS_INTRA_CRAN_DIA	22538
Pressure   Difference(MeanArterial, MeanIntracranial)   Head, Intracranial   CNS	Cerebral perfusion pressure	CPP	Pressure difference between mean arterial pressure and mean pressure inside skull	MDC_PRESS_CEREB_PERF	22532
Pressure   Epidural   Head, Intracranial   CNS	Epidural pressure	ICPE	Pressure inside skull outside dura	MDC_PRESS_INTRA_CRAN_EPIDURAL	22540
Pressure   Epidural, Mean   Head, Intracranial   CNS	Mean epidural pressure	ICPEM	Mean pressure inside skull outside dura	MDC_PRESS_INTRA_CRAN_EPIDURAL_MEAN	22543
Pressure   Epidural, Systolic   Head, Intracranial   CNS	Systolic epidural pressure	ICPES	Maximum pressure inside skull outside dura, caused by filling of vessels during systolic phase of blood pressure	MDC_PRESS_INTRA_CRAN_EPIDURAL_SYS	22541
Pressure   Epidural, Diastolic   Head, Intracranial   CNS	Diastolic epidural pressure	ICPED	Minimum pressure inside skull outside dura, caused by emptying of vessels during diastolic phase of blood pressure	MDC_PRESS_INTRA_CRAN_EPIDURAL_DIA	22542

**Table A.7.8.1—Nomenclature and codes for neurological monitoring measurements (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pressure   Subdural   Head, Intracranial   CNS	Subdural pressure	ICPS	Pressure inside skull inside dura	MDC_PRESS_INTRA_CRAN_SUBDURAL	22544
Pressure   Subdural, Mean   Head, Intracranial   CNS	Mean subdural pressure	ICPSM	Mean pressure inside skull inside dura	MDC_PRESS_INTRA_CRAN_SUBDURAL_MEAN	22547
Pressure   Subdural, Systolic   Head, Intracranial   CNS	Systolic subdural pressure	ICPSS	Maximum pressure inside skull inside dura, caused by filling of vessels during systolic phase of blood pressure	MDC_PRESS_INTRA_CRAN_SUBDURAL_SYS	22545
Pressure   Subdural, Diastolic   Head, Intracranial   CNS	Diastolic subdural pressure	ICPSD	Minimum pressure inside skull inside dura, caused by emptying of vessels during diastolic phase of blood pressure	MDC_PRESS_INTRA_CRAN_SUBDURAL_DIA	22546
Pressure   Tissue   Head, Intracranial   CNS	Intracranial tissue pressure	ICPT	Pressure inside skull inside brain tissue	MDC_PRESS_INTRA_CRAN_TISS	22548
Pressure   Tissue, Mean   Head, Intracranial   CNS	Mean intracranial tissue pressure	ICPTM	Mean pressure inside skull inside brain tissue	MDC_PRESS_INTRA_CRAN_TISS_MEAN	22551
Pressure   Systolic   Head, Intracranial   CNS	Systolic intracranial pressure	ICPTS	Maximum pressure inside skull inside brain tissue, caused by filling of vessels during systolic phase of blood pressure	MDC_PRESS_INTRA_CRAN_TISS_SYS	22549
Pressure   Diastolic   Head, Intracranial   CNS	Diastolic intracranial pressure	ICPTD	Minimum pressure inside skull inside brain tissue, caused by emptying of vessels during diastolic phase of blood pressure	MDC_PRESS_INTRA_CRAN_TISS_DIA	22550
Pressure   Ventricular   Head, Intracranial   CNS	Ventricular pressure	ICPV	Pressure inside skull inside ventricle	MDC_PRESS_INTRA_CRAN_VENT	22552
Pressure   Ventricular, Mean   Head, Intracranial   CNS	Mean ventricular pressure	ICPVM	Mean pressure inside skull inside ventricle	MDC_PRESS_INTRA_CRAN_VENT_MEAN	22555
Pressure   Ventricular, Systolic   Head, Intracranial   CNS	Systolic ventricular pressure	ICPVS	Maximum pressure inside skull inside ventricle, caused by filling of vessels during systolic phase of blood pressure	MDC_PRESS_INTRA_CRAN_VENT_SYS	22553
Pressure   Ventricular, Diastolic   Head, Intracranial   CNS	Diastolic ventricular pressure	ICPVD	Minimum pressure inside skull inside ventricle, caused by emptying of vessels during diastolic phase of blood pressure	MDC_PRESS_INTRA_CRAN_VENT_DIA	22554

**Table A.7.8.1—Nomenclature and codes for neurological monitoring measurements (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Score   GlasgowComaScore   CNS State   CNS	Glasgow coma score	GCS	Score that monitors the neurologic status and probable outcome of patient	MDC_SCORE_GLAS_COMA	22656
Score   GlasgowComaScore, SubscoreEye   CNS State   CNS	Glasgow coma score, eye	GCSE	Subscore for visual reactions of score that monitors the neurologic status and probable outcome of patient	MDC_SCORE_EYE_SUBSC_GLAS_COMA	22658
Score   GlasgowComaScore, SubscoreMotoric   CNS State   CNS	Glasgow coma score, motoric	GCSM	Subscore for motoric reactions of score that monitors the neurologic status and probable outcome of patient	MDC_SCORE_MOTOR_SUBSC_GLAS_COMA	22659
Score   GlasgowComaScore, SubscoreVerbal   CNS State   CNS	Glasgow coma score, verbal	GCSV	Subscore for verbal reactions of score that monitors the neurologic status and probable outcome of patient	MDC_SCORE_SUBSC_VERBAL_GLAS_COMA	22660
Score   GlasgowComaScore, Sum   CNS State   CNS	Glasgow coma score	GCSS	Sum of subscores for score that monitors the neurologic status and probable outcome of patient	MDC_SCORE_SUBSC_SUM_GLAS_COMA	22657
Score   Sleepstage, EEG   CNS State   CNS	Sleep stage		Sleep stage determined out of the EEG, EOG, and EMG; sleep depth	MDC_EEG_SCORE_SLEEPSTG	22664

**Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   Background, Unspecified   Cortex, EEG   CNS	Background activity		Background activity description, unspecified	MDC_EEG_BKGD_CRTX	23560
Pattern   Background, BetaActivity   Cortex, EEG   CNS	Background activity beta		Background activity description, beta activity	MDC_EEG_BKGD_CRTX_ACTIV_BETA	23568
Pattern   Background, SigmaActivity   Cortex, EEG   CNS	Background activity sigma		Background activity description, sigma activity	MDC_EEG_BKGD_CRTX_ACTIV_SIGMA	23576
Pattern   Background, GammaActivity   Cortex, EEG   CNS	Background activity gamma		Background activity description, gamma activity	MDC_EEG_BKGD_CRTX_ACTIV_GAMMA	23584
Pattern   Background, AlphaActivity   Cortex, EEG   CNS	Background activity alpha		Background activity description, alpha activity	MDC_EEG_BKGD_CRTX_ACTIV_ALPHA	23592
Pattern   Background, MuActivity   Cortex, EEG   CNS	Background Mu activity		Background activity, mu activity	MDC_EEG_BKGD_CRTX_ACTIV_MU	23600
Pattern   Background, ThetaActivity   Cortex, EEG   CNS	Background activity theta		Background activity, theta activity	MDC_EEG_BKGD_CRTX_ACTIV_THETA	23608
Pattern   Background, BisynchronousThetaActivity   Cortex, EEG   CNS	Background activity bisynchronous theta		Background activity, bisynchronous theta activity	MDC_EEG_BKGD_CRTX_ACTIV_THETA_BISYNC	23616
Pattern   Background, DeltaActivity   Cortex, EEG   CNS	Background activity delta		Background activity description, delta activity	MDC_EEG_BKGD_CRTX_ACTIV_DELTA	23624
Pattern   Background, BisynchronousDeltaActivity   Cortex, EEG   CNS	Background activity bisynchronous delta		Background activity description, bisynchronous delta activity	MDC_EEG_BKGD_CRTX_ACTIV_DELTA_BISYNC	23632
Pattern   Background, ArrhythmicDeltaActivity   Cortex, EEG   CNS	Background activity arrhythmic delta		Background activity description, arrhythmic delta activity	MDC_EEG_BKGD_CRTX_ACTIV_ARRHY_DELTA	23640
Pattern   Background, SlowFusedTransients   Cortex, EEG   CNS	Background activity slow fused transients		Background activity description, slow fused transients	MDC_EEG_BKGD_CRTX_TRANS_FUSED_SLOW	23648

**Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   Classification, UnspecifiedSleepStage   Cortex, EEG   CNS	Sleep stage unspecified		Sleep state description, unspecified	MDC_EEG_CLS_CRTX_SLP_STG	23656
Pattern   Classification, Unstageable   Cortex, EEG   CNS	Sleep stage unstageable		Sleep state description, unstageable, movement time	MDC_EEG_CLS_CRTX_UNSTGABLE	23664
Pattern   Classification, StageWake,   Cortex, EEG   CNS	Sleep stage wake		Sleep state description, stage wake	MDC_EEG_CLS_CRTX_WAKE_STG	23672
Pattern   Classification, REMsleep   Cortex, EEG   CNS	Sleep stage REM		Sleep state description, REM sleep	MDC_EEG_CLS_CRTX_SLPREM	23680
Pattern   Classification, REMspindleSleep   Cortex, EEG   CNS	Sleep stage REM with sleep spindle		Sleep state description, REM-spindle sleep	MDC_EEG_CLS_CRTX_SLPREM_SPINDLE	23688
Pattern   Classification, SleepStageI   Cortex, EEG   CNS	Sleep Stage I		Sleep state description, Stage I sleep	MDC_EEG_CLS_CRTX_SLP_STG_I	23696
Pattern   Classification, SleepStageII   Cortex, EEG   CNS	Sleep Stage II		Sleep state description, Stage II sleep	MDC_EEG_CLS_CRTX_SLP_STG_II	23704
Pattern   Classification, SleepStageIII   Cortex, EEG   CNS	Sleep Stage III		Sleep state description, Stage III sleep	MDC_EEG_CLS_CRTX_SLP_STG_III	23712
Pattern   Classification, SleepStageIV   Cortex, EEG   CNS	Sleep stage IV		Sleep state description, Stage IV sleep	MDC_EEG_CLS_CRTX_SLP_STG_IV	23720
Pattern   Classification, AlphaDeltaSleep   Cortex, EEG   CNS	Alphadelta Sleep		Sleep state description, alpha-delta sleep	MDC_EEG_CLS_CRTX_SLP_STG_ALPHA_DELTA	23728
Pattern   Classification, SleepActivity   Cortex, EEG   CNS	Sleep activity and event		Sleep activity and event description, sleep activity	MDC_EEG_CLS_CRTX_SLP_ACTIV	23736
Pattern   Classification, SleepSpindle   Cortex, EEG   CNS	Sleep spindle		Sleep activity and event description, sleep spindle	MDC_EEG_CLS_CRTX_SLP_SPINDLE	23744
Pattern   Classification, V_Wave   Cortex, EEG   CNS	Sleep V wave		Sleep activity and event description, V waves	MDC_EEG_CLS_CRTX_WV_V	23752
Pattern   Classification, F_Wave   Cortex, EEG   CNS	Sleep F wave		Sleep activity and event description, F waves	MDC_EEG_CLS_CRTX_WV_F	23760

**Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   Classification, K_Complex   Cortex, EEG   CNS	Sleep K complex		Sleep activity and event description, K complexes	MDC_EEG_CLS_CRTX_CMPLX_K	23768
Pattern   Classification, PostOccipitalSharpTransient   Cortex, EEG   CNS	Sleep post occipital sharp transient		Sleep activity and event, postoccipital sharp transients	MDC_EEG_CLS_CRTX_POSTOCCIP_TRANS_SHARP	23776
Pattern   Classification, SawToothWave   Cortex, EEG   CNS	Sleep sawtooth wave		Sleep activity and event description, sawtooth waves	MDC_EEG_CLS_CRTX_WV_SAW	23784
Pattern   Classification, SleepStageShift   Cortex, EEG   CNS	Sleep stage shift		Sleep activity and event description, sleep stage shifts	MDC_EEG_CLS_CRTX_SLP_STG_SHIFT	23792
Pattern   Classification, Arousal   Cortex, EEG   CNS	Sleep arousal		Sleep activity and event description, arousals	MDC_EEG_CLS_CRTX_AROUSAL	23800
Pattern   Classification, Awakening   Cortex, EEG   CNS	Sleep awakening		Sleep activity and event description, awakenings	MDC_EEG_CLS_CRTX_AWAKENING	23808
Pattern   ParoxismalActivity, UnspecifiedEpileptiformDischarge   Cortex, EEG   CNS	Sharp appearing or epileptiform activity		Sharp appearing or epileptiform activity, unspecified epileptiform discharges	MDC_EEG_PAROX_CRTX_DISCHG_EPILEP	23816
Pattern   ParoxismalActivity, SharpTransient   Cortex, EEG   CNS	Sharp transient		Sharp appearing or epileptiform activity, sharp transients	MDC_EEG_PAROX_CRTX_TRANS_SHARP	23824
Pattern   ParoxismalActivity, Wicket   Cortex, EEG   CNS	Wicket		Sharp appearing or epileptiform activity, wickets	MDC_EEG_PAROX_CRTX_WICKET	23832
Pattern   ParoxismalActivity, SmallSharpSpike   Cortex, EEG   CNS	Small sharp spike		Sharp appearing or epileptiform, small sharp spikes	MDC_EEG_PAROX_CRTX_SPK_SMALL	23840
Pattern   ParoxismalActivity, ZetaWave   Cortex, EEG   CNS	Zeta wave		Sharp appearing or epileptiform, zeta waves	MDC_EEG_PAROX_CRTX_WV_ZETA	23848
Pattern   ParoxismalActivity, TriphasicWave   Cortex, EEG   CNS	Triphasic wave		Sharp appearing or epileptiform activity, triphasic waves	MDC_EEG_PAROX_CRTX_WV_TRIPHAS	23856
Pattern   ParoxismalActivity, PhantomSpikeAndWaveActivity   Cortex, EEG   CNS	Phantom spike and wave activity		Sharp appearing or epileptiform activity, phantom spike and wave activity	MDC_EEG_PAROX_CRTX_SPK_AND_WV_PHANTOM	23864

**Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   ParoxismalActivity, 14And6HzPositiveBursts   Cortex, EEG   CNS	14 and 6 Hz positive bursts		Sharp appearing or epileptiform activity, 14 and 6 Hz positive bursts	MDC_EEG_PAROX_CRTX_BURST_POS_14_AND_6HZ	23872
Pattern   ParoxismalActivity, LambdaWave   Cortex, EEG   CNS	Lambda wave		Sharp appearing or epileptiform activity	MDC_EEG_PAROX_CRTX_WV_LAMBDA	23880
Pattern   ParoxismalActivity, UnspecificIctalDischarge   Cortex, EEG   CNS	Epileptic or potentially epileptogenic activity		Epileptic or potentially epileptogenic activity identifiers, unspecific ictal discharges	MDC_EEG_PAROX_CRTX_DISCHG	23888
Pattern   ParoxismalActivity, SharpWave   Cortex, EEG   CNS	Epileptic or potentially epileptogenic sharp wave		Epileptic or potentially epileptogenic activity identifiers, sharp waves	MDC_EEG_PAROX_CRTX_WV_SHARP	23896
Pattern   ParoxismalActivity, Spike   Cortex, EEG   CNS	Epileptic or potentially epileptogenic spike		Epileptic or potentially epileptogenic activity identifiers, spikes	MDC_EEG_PAROX_CRTX_SPK	23904
Pattern   ParoxismalActivity, MultipleSpikes   Cortex, EEG   CNS	Multiple spike		Epileptic or potentially epileptogenic activity identifiers, multiple spikes	MDC_EEG_PAROX_CRTX_SPK_MULT	23912
Pattern   ParoxismalActivity, SpikeAndWaveComplex   Cortex, EEG   CNS	Spike and wave complex		Epileptic or potentially epileptogenic activity identifiers, spike and wave complexes	MDC_EEG_PAROX_CRTX_SPK_AND_WV_CMPLX	23920
Pattern   ParoxismalActivity, AtypicalSpikeAndWaveComplex   Cortex, EEG   CNS	Atypical spike and wave complex		Epileptic or potentially epileptogenic activity identifiers, atypical spike and wave complexes	MDC_EEG_PAROX_CRTX_SPK_AND_WV_CMPLX_ATYP	23928
Pattern   ParoxismalActivity, SharpAndSlowWaveComplex   Cortex, EEG   CNS	Sharp and slow wave complex		Epileptic or potentially epileptogenic activity identifiers, sharp and slow wave complexes	MDC_EEG_PAROX_CRTX_WV_CMPLX_SHARP_SLOW	23936
Pattern   ParoxismalActivity, RhythmicSharpWaves   Cortex, EEG   CNS	Rhythmic sharp waves		Epileptic or potentially epileptogenic activity identifiers, rhythmic sharp waves	MDC_EEG_PAROX_CRTX_WV_RHYTHMIC_MULT_SHARP	23944
Pattern   ParoxismalActivity, BurstSuppression   Cortex, EEG   CNS	Burst suppression		Epileptic or potentially epileptogenic activity identifiers, burst suppression	MDC_EEG_PAROX_CRTX_BURST_SUPPRN	23952

**Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   ParoxismalActivity, MultipleIndependentSpikesAndAsynchronousSlow   Cortex, EEG   CNS	Multiple independent spikes and asynchronous slow waves		Epileptic or potentially epileptogenic activity identifiers, multiple independent spikes and asynchronous slow (hypsarrhythmia)	MDC_EEG_PAROX_CRTX_SPK_MULT_AND_ASYNC_SLOW	23960
Pattern   ParoxismalActivity, UnspecifiedPeriodicCerebralActivity   Cortex, EEG   CNS	Periodic and quasiperiodic cerebral activity		Cont. moderate frequency periodic epileptiform discharges, unspecified periodic cerebral activity	MDC_EEG_PAROX_CRTX_CEREB_ACTIV_PERI	23968
Pattern   ParoxismalActivity, QuasiperiodicTriphasicWaves   Cortex, EEG   CNS	Quasiperiodic triphasic waves		Cont. moderate frequency periodic epileptiform discharges, quasiperiodic triphasic waves	MDC_EEG_PAROX_CRTX_WV_TRIPHAS_MULT_QUASIPERI	23976
Pattern   ParoxismalActivity, PeriodicTriphasicWaves   Cortex, EEG   CNS	Periodic triphasic waves		Cont. moderate frequency periodic epileptiform discharges, periodic triphasic waves	MDC_EEG_PAROX_CRTX_WV_TRIPHAS_MULT_PERI	23984
Pattern   ParoxismalActivity, PeriodicEpileptiformDischarges   Cortex, EEG   CNS	Periodic epileptiform discharges		Cont. moderate frequency periodic epileptiform discharges, periodic epileptiform discharges	MDC_EEG_PAROX_CRTX_DISCHG_EPILEP_MULT_PERI	23992
Pattern   ParoxismalActivity, PeriodicComplexes   Cortex, EEG   CNS	Periodic cerebral complexes		Cont. moderate frequency periodic epileptiform discharges, Periodic complexes	MDC_EEG_PAROX_CRTX_CMPLX_MULT_PERI	24000
Pattern   ParoxismalActivity, QuasiperiodicSharpWaves   Cortex, EEG   CNS	Quasiperiodic cerebral sharp waves		Cont. moderate frequency periodic epileptiform discharges, quasiperiodic sharp waves	MDC_EEG_PAROX_CRTX_WV_MULT_SHARP_QUASIPERI	24008
Pattern   ParoxismalActivity, PeriodicSharpWaves   Cortex, EEG   CNS	Periodic sharp waves		Cont. moderate frequency periodic epileptiform discharges, periodic sharp waves	MDC_EEG_PAROX_CRTX_WV_MULT_SHARP_PERI	24016
Pattern   ParoxismalActivity, PeriodicSuppressions   Cortex, EEG   CNS	Periodic suppressions		Cont. moderate frequency periodic epileptiform discharges, periodic suppressions	MDC_EEG_PAROX_CRTX_SUPPRN_MULT_PERI	24024
Pattern   ParoxismalActivity, PeriodicBurstsWithSuppressions   Cortex, EEG   CNS	Periodic bursts with suppressions		Cont. moderate frequency periodic epileptiform discharges, periodic bursts with suppressions	MDC_EEG_PAROX_CRTX_BURST_W_SUPPRN_MULT_PERI	24032

Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   ExternallyInfluenced, UnspecifiedEyeMovements   Cortex, EEG   CNS	Eye-related activity		Eye-related activity in the EEG, unspecified eye movements	MDC_EEG_EXT_CRTX_EYE_MVMT_MULT	24040
Pattern   ExternallyInfluenced, EyeBlink   Cortex, EEG   CNS	Eye blinks		Eye-related activity in the EEG, eye blinks	MDC_EEG_EXT_CRTX_EYE_BLINK	24048
Pattern   ExternallyInfluenced, NystagmoidEyeMovements   Cortex, EEG   CNS	Nystagmoid eye movements		Eye-related activity in the EEG, nystagmoid eye movements	MDC_EEG_EXT_CRTX_EYE_MVMT_NYSTAG_MULT	24056
Pattern   ExternallyInfluenced, SlowEyeMovements   Cortex, EEG   CNS	Slow eye movements		Eye-related activity in the EEG, slow eye movements	MDC_EEG_EXT_CRTX_EYE_MVMT_NYSTAG_MULT	24064
Pattern   ExternallyInfluenced, FastIrregularEyeMovements   Cortex, EEG   CNS	Fast irregular eye movements		Eye-related activity in the EEG, fast irregular eye movements	MDC_EEG_EXT_CRTX_EYE_MVMT_MULT_FAST_IRREG	24072
Pattern   ExternallyInfluenced, RapidEyeMovements   Cortex, EEG   CNS	Rapid eye movements		Eye-related activity in the EEG, rapid eye movements	MDC_EEG_EXT_CRTX_EYE_MVMT_MULT_RAPID	24080
Pattern   ExternallyInfluenced, PhoticDrivingActivity   Cortex, EEG   CNS	Eye-related photodriving activity		Eye-related activity in the EEG, photic driving activity	MDC_EEG_EXT_CRTX_EYE_ACTIV_PHOTIC_DRV	24088
Pattern   ExternallyInfluenced, PhotomyogenicActivity   Cortex, EEG   CNS	Eye-related photomyogenic activity		Eye-related activity in the EEG, photomyogenic activity	MDC_EEG_EXT_CRTX_EYE_ACTIV_PHOTOMYGENIC	24096
Pattern   ExternallyInfluenced, PhotoparoxysmalActivity   Cortex, EEG   CNS	Eye-related photo-paroxysmal activity		Eye-related activity in the EEG, photoparoxysmal activity	MDC_EEG_EXT_CRTX_EYE_ACTIV_PHOTOPAROX	24104
Pattern   ExternallyInfluenced, Electroretinogram   Cortex, EEG   CNS	Eye-related activity electro-retinogram		Eye-related activity, electroretinogram	MDC_EEG_EXT_CRTX_EYE_ERG	24112
Pattern   ExternallyInfluenced, UnspecifiedMyogenicActivity   NonCortex, EEG   CNS	Myogenic noncerebral activity		Myogenic noncerebral activity, unspecified myogenic activity	MDC_EEG_EXT_ACTIV_MYOGENIC	24120

Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   ExternallyInfluenced, PalatalMyoclonus   NonCortex, EEG   CNS	Myogenic palatal myoclonus		Myogenic noncerebral activity, palatal myoclonus	MDC_EEG_EXT_PALATAL_MYOCLONUS	24128
Pattern   ExternallyInfluenced, Myokymia   NonCortex, EEG   CNS	Myogenic noncerebral myokymia		Myogenic noncerebral activity, myokymia	MDC_EEG_EXT_MYOKYMIA	24136
Pattern   ExternallyInfluenced, FacialSynkinesis   NonCortex, EEG   CNS	Myogenic noncerebral facial synkinesis		Myogenic noncerebral activity, facial synkinesis	MDC_EEG_EXT_FACIA_SYNKINESIS	24144
Pattern   ExternallyInfluenced, HemifacialSpasms   NonCortex, EEG   CNS	Myogenic hemifacial spasms		Myogenic noncerebral activity, hemifacial spasms	MDC_EEG_EXT_HEMIFACIAL_SPASM	24152
Pattern   ExternallyInfluenced, ExtraocularMuscleActivity   NonCortex, EEG   CNS	Extraocular muscle activity		Myogenic noncerebral activity, extraocular muscle activity	MDC_EEG_EXT_EXTRA_OCUL_MUSCL_ACTIV	24160
Pattern   ExternallyInfluenced, TremorActivity   NonCortex, EEG   CNS	Myogenic tremor activity		Myogenic noncerebral activity, tremor activity	MDC_EEG_EXT_ACTIV_TREMOR	24168
Pattern   ExternallyInfluenced, MyoclonicActivity   NonCortex, EEG   CNS	Myoclonic activity		Myogenic noncerebral activity, myoclonic activity	MDC_EEG_EXT_ACTIV_MYOCLONIC	24176
Pattern   ExternallyInfluenced, PeriodicMovementsOfSleep   NonCortex, EEG   CNS	Periodic movements of sleep		Myogenic noncerebral activity, periodic movements of sleep	MDC_EEG_EXT_SLP_MVMT_MULT_PERI	24184
Pattern   ExternallyInfluenced, PeriodicMovementsOfSleepWithArousals   NonCortex, EEG   CNS	Periodic movements of sleep with arousals		Myogenic noncerebral activity, periodic movements of sleep with arousals	MDC_EEG_EXT_SLP_MVMT_W_AROUS_MULT_PERI	24192
Pattern   ArtifactualActivity, Unspecified   Artifact, NonCortex, EEG   CNS	Artifactual activity		Artifactual activity, unspecified artifact	MDC_EEG_ARTIF	24200

Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   ArtifactualActivity, ElectrodeInstrumentalArtifact   Artifact, NonCortex, EEG   CNS	Electrode instrumental artifactual activity		Artifactual activity, electrode/instrumental artifact	MDC_EEG_ARTIF_ELECTRODE_INSTRUM	24208
Pattern   ArtifactualActivity, MovementArtifact   Artifact, NonCortex, EEG   CNS	Movement artifactual activity		Artifactual activity, movement artifact	MDC_EEG_ARTIF_MVMT	24216
Pattern   ArtifactualActivity, SweatOrGalvanicArtifact   Artifact, NonCortex, EEG   CNS	Sweat of galvanic artifactual activity		Artifactual activity, sweat or galvanic artifact	MDC_EEG_ARTIF_SWEAT_OR_GALV	24224
Pattern   ArtifactualActivity, PulseArtifact   Artifact, NonCortex, EEG   CNS	Pulse artifactual activity		Artifactual activity, pulse artifact	MDC_EEG_ARTIF_PULSE	24232
Pattern   ArtifactualActivity, ECG_Artifact   Artifact, NonCortex, EEG   CNS	ECG artifactual activity		Artifactual activity, ECG artifact	MDC_EEG_ARTIF_EKG	24240
Pattern   ArtifactualActivity, RespiratoryArtifact   Artifact, NonCortex, EEG   CNS	Respiratory artifactual activity		Artifactual activity, respiratory artifact	MDC_EEG_ARTIF_RESP	24248
Pattern   ArtifactualActivity, GlossokineticArtifact   Artifact, NonCortex, EEG   CNS	Glossokinetic artifactual activity		Artifactual activity, glossokinetic artifact	MDC_EEG_ARTIF_GLOSSOKINETIC	24256
Pattern   ArtifactualActivity, SwallowingChewingSuckingArtifact   Artifact, NonCortex, EEG   CNS	Swallowing and chewing Artifactual activity		Artifactual activity; swallowing, chewing, and sucking artifact	MDC_EEG_ARTIF_SWALLOW_ETC	24264
Pattern   ArtifactualActivity, ExternalInterferenceArtifact   Artifact, NonCortex, EEG   CNS	External interference Artifactual activity		Artifactual activity, external interference artifact	MDC_EEG_ARTIF_EXT_INTERF	24272
Pattern   EyeMovement, Blink   Eye, EOG   CNS	Eye blink	BL	Eye blink detected	MDC_EOG_EYE_MVMT_BLINK	24280

Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   EyeMovement, Saccadic   Eye, EOG   CNS	Saccade	SAC	Saccadic eye movement detected from the EOG	MDC_EOG_EYE_MVMT_SACCADIC	24288
Pattern   EyeMovement, Rapid   Eye, EOG   CNS	REM	REM	Rapid eye movement detected from the EOG	MDC_EOG_EYE_MVMT_RAPID	24296
Pattern   EyeMovement, Slow   Eye, EOG   CNS	Slow eye movement	SEM	Slow eye movement detected from the EOG	MDC_EOG_EYE_MVMT_SLOW	24304
Pattern   EyeMovement, Other   Eye, EOG   CNS	Other eye movement	OEM	Other type of eye movement detected from the EOG	MDC_EOG_EYE_MVMT_OTHER	24312
Pattern   EyeMovement, Closing   Eye, EOG   CNS	Eyes closed	EC	Subject closes his/her eye (during sleep measurement)	MDC_EOG_EYE_MVMT_CLOSING	24320
Pattern   EyeMovement, Opening   Eye, EOG   CNS	Eyes open	EO	Subject opens his/her eye (during sleep measurement)	MDC_EOG_EYE_MVMT_OPENING	24328
Pattern   ParoxismalActivity, Unspecified   Muscle, StandardEMG   MuscularSystem	EMG unspecified waveform		EMG waveform, unspecified	MDC_EMG_PAROX_MUSCL	24336
Pattern   ParoxismalActivity, UnspecifiedPotentialUnderVoluntaryControl   Muscle, StandardEMG   MuscularSystem	EMG waveform under voluntary control		EMG waveform, unspecified potential under voluntary control	MDC_EMG_PAROX_MUSCL_VOL_CTL	24344
Pattern   ParoxismalActivity, MotorUnitPotential   Muscle, StandardEMG   MuscularSystem	EMG motor unit potential		EMG waveform, motor unit potential	MDC_EMG_PAROX_MUSCL_MOTOR_UNIT_POTL	24352
Pattern   ParoxismalActivity, Doublet   Muscle, StandardEMG   MuscularSystem	EMG doublet waveform		EMG waveform, doublet	MDC_EMG_PAROX_MUSCL_DOUBLET	24360
Pattern   ParoxismalActivity, Triplet   Muscle, StandardEMG   MuscularSystem	EMG triplet waveform		EMG, triplet	MDC_EMG_PAROX_MUSCL_TRIPLET	24368
Pattern   ParoxismalActivity, Multiplet   Muscle, StandardEMG   MuscularSystem	EMG multiplet waveform		EMG waveform, multiplet	MDC_EMG_PAROX_MUSCL_MULTIPLLET	24376

**Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   ParoxismalActivity, InsertionalActivity   Muscle, StandardEMG   MuscularSystem	EMG insertional activity		EMG waveform, insertional activity	MDC_EMG_PAROX_MUSCL_ACTIV_INSERTIONAL	24384
Pattern   ParoxismalActivity, EndPlateNoise   Muscle, StandardEMG   MuscularSystem	EMG endplate noise		EMG waveform, endplate noise	MDC_EMG_PAROX_MUSCL_NOISE_ENDPLATE	24392
Pattern   ParoxismalActivity, EndPlateSpike   Muscle, StandardEMG   MuscularSystem	EMG endplate spike		EMG waveform, endplate spike	MDC_EMG_PAROX_MUSCL_SPK_ENDPLATE	24400
Pattern   ParoxismalActivity, UnspecifiedIterativeDischarges   Muscle, StandardEMG   MuscularSystem	EMG unspecified iterative discharge		EMG waveform, unspecified iterative discharges	MDC_EMG_PAROX_MUSCL_DISCHG_ITER	24408
Pattern   ParoxismalActivity, FibrillationPotential   Muscle, StandardEMG   MuscularSystem	EMG fibrillation potential		EMG waveform, fibrillation potential	MDC_EMG_PAROX_MUSCL_FIBRIL_POTL	24416
Pattern   ParoxismalActivity, PositiveSharpWave   Muscle, StandardEMG   MuscularSystem	EMG positive sharp wave		EMG waveform, positive sharp wave	MDC_EMG_PAROX_MUSCL_WV_SHARP_POS	24424
Pattern   ParoxismalActivity, FasciculationPotential   Muscle, StandardEMG   MuscularSystem	EMG fasciculation potential		EMG waveform, fasciculation potential	MDC_EMG_PAROX_MUSCL_FASCIC_POTL	24432
Pattern   ParoxismalActivity, MyotonicDischarge   Muscle, StandardEMG   MuscularSystem	EMG myotonic discharge		EMG waveform, myotonic discharge	MDC_EMG_PAROX_MUSCL_DISCHG_MYOTONIC	24440
Pattern   ParoxismalActivity, ComplexRepetitiveDischarges   Muscle, StandardEMG   MuscularSystem	EMG complex repetitive discharge		EMG waveform, complex repetitive discharges	MDC_EMG_PAROX_MUSCL_DISCHG_MULT_CMPLX_REPEAT	24448
Pattern   ParoxismalActivity, MyokymicDischarges   Muscle, StandardEMG   MuscularSystem	EMG myokymic discharge		EMG waveform, myokymic discharges	MDC_EMG_PAROX_MUSCL_DISCHG_MYOKEMIC_MULT	24456

**Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   ParoxismalActivity , CrampDischarges   Muscle, StandardEMG   MuscularSystem	EMG cramp discharge		EMG waveform, cramp discharges	MDC_EMG_PAROX_MUSCL_DISCHG_CRAMP_MULT	24464
Pattern   ParoxismalActivity , AfterDischarges   Muscle, StandardEMG   MuscularSystem	EMG waveform after discharge		EMG waveform, after discharges	MDC_EMG_PAROX_MUSCL_AFTER_DISCHG_MULT	24472
Pattern   ParoxismalActivity, Unspecified   Nerve, Motoric, EMG   PeripheralNervousSystem	Motor NCS unspecified waveform		Motor NCS waveform, unspecified	MDC_EMG_PAROX_NERV_MOTOR	24480
Pattern   ParoxismalActivity, F_Wave   Nerve, Motoric, EMG   PeripheralNervousSystem	Motor NCS F wave		Motor NCS waveform, F wave	MDC_EMG_PAROX_NERV_MOTOR_WV_F	24488
Pattern   ParoxismalActivity, H_Reflex   Nerve, Motoric, EMG   PeripheralNervousSystem	Motor NCS H reflex wave		Motor NCS waveform, H reflex	MDC_EMG_PAROX_NERV_MOTOR_REFLEX_H	24496
Pattern   ParoxismalActivity, C_Reflex   Nerve, Motoric, EMG   PeripheralNervousSystem	Motor NCS C reflex wave		Motor NCS waveform, C reflex	MDC_EMG_PAROX_NERV_MOTOR_REFLEX_C	24504
Pattern   ParoxismalActivity, SilentPeriod   Nerve, Motoric, EMG   PeripheralNervousSystem	Motor NCS silent period		Motor NCS, silent period	MDC_EMG_PAROX_NERV_MOTOR_SILENT_PERIOD	24512
Pattern   ParoxismalActivity, AxonReflex   Nerve, Motoric, EMG   PeripheralNervousSystem	Motor NCS waveform axon reflex		Motor NCS waveform, axon reflex	MDC_EMG_PAROX_NERV_MOTOR_AXON_REFLEX	24520
Pattern   ParoxismalActivity, Unspecified   Nerve, Sensory, EMG   PeripheralNervousSystem	Sensory NCS unspecified		Sensory NCS waveform, unspecified	MDC_EMG_PAROX_NERV_SENS	24528
Pattern   ParoxismalActivity, SNAP   Nerve, Sensory, EMG   PeripheralNervousSystem	Sensory NCS SNAP		Sensory NCS waveform, single nerve action potential	MDC_EMG_PAROX_NERV_SENS_SNAP	24536
Pattern   ParoxismalActivity, R1   Nerve, Sensory, EMG   PeripheralNervousSystem	Sensory NCS R1		Sensory NCS waveform, R1	MDC_EMG_PAROX_NERV_SENS_R1	24544

**Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   ParoxismalActivity, R2   Nerve, Sensory, EMG   PeripheralNervousSystem	Sensory NCS R2		Sensory NCS waveform, R2	MDC_EMG_PAROX_NERV_SENS_R2	24552
Pattern   ParoxismalActivity, ContralateralR2   Nerve, Sensory, EMG   PeripheralNervousSystem	Sensory NCS contralateral R2		Sensory NCS, contralateral R2	MDC_EMG_PAROX_NERV_SENS_R2 CONTRALAT	24560
Pattern   EvokedPotential, Unspecified   Cortex, BAEP   CNS	BAEP unspecified		BAEP waveform, unspecified	MDC_EVOK_POTL_CRTX_BAEP	24568
Pattern   EvokedPotential, Peak_I   Cortex, BAEP   CNS	BAEP Peak I		BAEP waveform, Peak I	MDC_EVOK_POTL_CRTX_BAEP_I_PK	24576
Pattern   EvokedPotential, Peak_II   Cortex, BAEP   CNS	BAEP Peak II		BAEP waveform, Peak II	MDC_EVOK_POTL_CRTX_BAEP_II_PK	24584
Pattern   EvokedPotential, Peak_III   Cortex, BAEP   CNS	BAEP Peak III		BAEP waveform, Peak III	MDC_EVOK_POTL_CRTX_BAEP_III_PK	24592
Pattern   EvokedPotential, Peak_IV   Cortex, BAEP   CNS	BAEP Peak IV		BAEP waveform, Peak IV	MDC_EVOK_POTL_CRTX_BAEP_IV_PK	24600
Pattern   EvokedPotential, Peak_V   Cortex, BAEP   CNS	BAEP Peak V		BAEP waveform, Peak V	MDC_EVOK_POTL_CRTX_BAEP_V_PK	24608
Pattern   EvokedPotential, Peak_VI   Cortex, BAEP   CNS	BAEP Peak VI		BAEP waveform, Peak VI	MDC_EVOK_POTL_CRTX_BAEP_VI_PK	24616
Pattern   EvokedPotential, Unspecified   Cortex, MLAEP   CNS	MLAEP unspecified waveform		MLAEP waveform, unspecified	MDC_EVOK_POTL_CRTX_MLAEP	24624
Pattern   EvokedPotential, N0_Peak   Cortex, MLAEP   CNS	MLAEP N0 peak		MLAEP waveform, N0 peak	MDC_EVOK_POTL_CRTX_MLAEP_N0_PK	24632
Pattern   EvokedPotential, P0_Peak   Cortex, MLAEP   CNS	MLAEP P0 peak		MLAEP waveform, P0 peak	MDC_EVOK_POTL_CRTX_MLAEP_P0_PK	24640
Pattern   EvokedPotential, Na_Peak   Cortex, MLAEP   CNS	MLAEP waveform Na peak		MLAEP, Na peak	MDC_EVOK_POTL_CRTX_MLAEP_NA_PK	24648

**Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   EvokedPotential, Pa_Peak   Cortex, MLAEP   CNS	MLAEP waveform Pa peak		MLAEP waveform, Pa peak	MDC_EVOK_POTL_CRTX_MLAEP_PA_PK	24656
Pattern   EvokedPotential, Nb_Peak   Cortex, MLAEP   CNS	MLAEP waveform Nb peak		MLAEP, Nb peak	MDC_EVOK_POTL_CRTX_MLAEP_NB_PK	24664
Pattern   EvokedPotential, Pb_Peak   Cortex, MLAEP   CNS	MLAEP waveform Pb peak		MLAEP waveform, Pb peak	MDC_EVOK_POTL_CRTX_MLAEP_PB_PK	24672
Pattern   EvokedPotential, unspecified   Cortex, LLAEP   CNS	LLAEP unspecified wave		LLAEP waveform, unspecified	MDC_EVOK_POTL_CRTX_LLAEP	24680
Pattern   EvokedPotential, Nb_Peak   Cortex, LLAEP   CNS	LLAEP Nb peak		LLAEP waveform, Nb peak	MDC_EVOK_POTL_CRTX_LLAEP_NB_PK	24688
Pattern   EvokedPotential, P1_Peak   Cortex, LLAEP   CNS	LLAEP P1 peak		LLAEP waveform, P1 peak	MDC_EVOK_POTL_CRTX_LLAEP_P1_PK	24696
Pattern   EvokedPotential, N1_Peak   Cortex, LLAEP   CNS	LLAEP N1 peak		LLAEP waveform, N1 peak	MDC_EVOK_POTL_CRTX_LLAEP_N1_PK	24704
Pattern   EvokedPotential, P2_Peak   Cortex, LLAEP   CNS	LLAEP P2 peak		LLAEP waveform, P2 peak	MDC_EVOK_POTL_CRTX_LLAEP_P2_PK	24712
Pattern   EvokedPotential, N2_Peak   Cortex, LLAEP   CNS	LLAEP N2 peak		LLAEP waveform, N2 peak	MDC_EVOK_POTL_CRTX_LLAEP_N2_PK	24720
Pattern   EvokedPotential, P300_Peak   Cortex, LLAEP   CNS	LLAEP P300 peak		LLAEP waveform, P300 Peak	MDC_EVOK_POTL_CRTX_LLAEP_P300_PK	24728
Pattern   EvokedPotential, Unspecified   Ear, CochlearNerve   PeripheralNervousSystem	ECoG unspecified waveform		ECoG waveform, unspecified	MDC_EVOK_POTL_EAR_COCHL	24736
Pattern   EvokedPotential, CochlearMicrophonic   Ear, CochlearNerve   PeripheralNervousSystem	ECoG waveform cochlear microphonic		ECoG waveform, cochlear microphonic	MDC_EVOK_POTL_EAR_COCHL_MICROPHONIC	24744

**Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   EvokedPotential, SummatingPotential   Ear, CochlearNerve   PeripheralNervousSystem	ECoG waveform summating potential		ECoG waveform, summating potential	MDC_EVOK_POTL_EAR_COCHL_SUM_POTL	24752
Pattern   EvokedPotential, NerveActionPotential   Ear, CochlearNerve   PeripheralNervousSystem	ECoG waveform Nerve action potential		ECoG waveform, nerve action potential peak	MDC_EVOK_POTL_EAR_COCHL_NAP	24760
Pattern   EvokedPotential, CochlearMicroSummatingPotential   Ear, CochlearNerve   PeripheralNervousSystem	ECoG waveform cochlear microsummating potential		ECoG waveform, cochlear microsummating potential	MDC_EVOK_POTL_EAR_COCHL_MICRO_SUM_POTL	24768
Pattern   EvokedPotential, SummatingPotentialNerveActionPotential   Ear, CochlearNerve   PeripheralNervousSystem	ECoG waveform summating potential nerve action potential		ECoG waveform, summating potential nerve action potential	MDC_EVOK_POTL_EAR_COCHL_SUM_POTL_NAP	24776
Pattern   EvokedPotential, CochlearMicroNerveActionPotential   Ear, CochlearNerve   PeripheralNervousSystem	ECoG waveform cochlear micronerve action potential		ECoG waveform, cochlear micronerve action potential	MDC_EVOK_POTL_EAR_COCHL_MICRO_NAP	24784
Pattern   EvokedPotential, Unspecified   Eye, Retina   PeripheralNervousSystem	ERG unspecified waveform		ERG waveform, unspecified	MDC_EVOK_POTL_EYE_RETINA	24792
Pattern   EvokedPotential, EarlyReceptorPotential   Eye, Retina   PeripheralNervousSystem	ERG waveform early receptor potential		ERG waveform, early receptor potential	MDC_EVOK_POTL_EYE_RETINA_RECEP_POTL_EARLY	24800
Pattern   EvokedPotential, A_Wave   Eye, Retina   PeripheralNervousSystem	ERG waveform A wave		ERG waveform, A wave	MDC_EVOK_POTL_EYE_RETINA_WV_A	24808
Pattern   EvokedPotential, B_Wave   Eye, Retina   PeripheralNervousSystem	ERG waveform B wave		ERG waveform, B wave	MDC_EVOK_POTL_EYE_RETINA_WV_B	24816

Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   EvokedPotential, C_Wave   Eye, Retina   PeripheralNervousSystem	ERG waveform C wave		ERG waveform, C wave	MDC_EVOK_POTL_EYE_RETINA_WV_C	24824
Pattern   EvokedPotential, Unspecified   Cortex, Patterned_VEP   CNS	Patterned VEP unspecified waveform		Patterned VEP waveform, unspecified	MDC_EVOK_POTL_CRTX_PATT_VEP	24832
Pattern   EvokedPotential, P50_Peak   Cortex, Patterned_VEP   CNS	Patterned VEP waveform P50 peak		Patterned VEP waveform, P50 peak	MDC_EVOK_POTL_CRTX_PATT_VEP_P50_PK	24840
Pattern   EvokedPotential, N75_Peak   Cortex, Patterned_VEP   CNS	Patterned VEP waveform N75 peak		Patterned VEP waveform, N75 peak	MDC_EVOK_POTL_CRTX_PATT_VEP_N75_PK	24848
Pattern   EvokedPotential, P100_Peak   Cortex, Patterned_VEP   CNS	Patterned VEP waveform P100 peak		Patterned VEP waveform, P100 peak	MDC_EVOK_POTL_CRTX_PATT_VEP_P100_PK	24856
Pattern   EvokedPotential, N145_Peak   Cortex, Patterned_VEP   CNS	Patterned VEP waveform N145 peak		Patterned VEP waveform, N145 peak	MDC_EVOK_POTL_CRTX_PATT_VEP_P145_PK	24864
Pattern   EvokedPotential, P175_Peak   Cortex, Patterned_VEP   CNS	Patterned VEP waveform P175 peak		Patterned VEP waveform, P175 peak	MDC_EVOK_POTL_CRTX_PATT_VEP_P175_PK	24872
Pattern   EvokedPotential, P300_Peak   Cortex, Patterned_VEP   CNS	Patterned VEP waveform P300 peak		Patterned VEP waveform, P300 peak	MDC_EVOK_POTL_CRTX_PATT_VEP_P300_PK	24880
Pattern   EvokedPotential, Unspecified   Cortex, Diffuse_Light_VEP   CNS	Diffuse light VEP unspecified waveform		Patterned VEP waveform, unspecified	MDC_EVOK_POTL_CRTX_DIFFUSE_LT_VEP	24888
Pattern   EvokedPotential, N1_Peak   Cortex, Diffuse_Light_VEP   CNS	Diffuse light VEP waveform N1 peak		Patterned VEP waveform, N1 peak	MDC_EVOK_POTL_CRTX_DIFFUSE_LT_VEP_N1_PK	24896
Pattern   EvokedPotential, P1_Peak   Cortex, Diffuse_Light_VEP   CNS	Diffuse light VEP waveform P1 peak		Patterned VEP waveform, P1 peak	MDC_EVOK_POTL_CRTX_DIFFUSE_LT_VEP_P1_PK	24904

Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   EvokedPotential, N2_Peak   Cortex, Diffuse_Light_VEP   CNS	Diffuse light VEP waveform N2 peak		Patterned VEP waveform, N2 peak	MDC_EVOK_POTL_CRTX_DIFFUSE_LT_VEP_N2_PK	24912
Pattern   EvokedPotential, P2_Peak   Cortex, Diffuse_Light_VEP   CNS	Diffuse light VEP waveform P2 peak		Patterned VEP waveform, P2 peak	MDC_EVOK_POTL_CRTX_DIFFUSE_LT_VEP_P2_PK	24920
Pattern   EvokedPotential, N3_Peak   Cortex, Diffuse_Light_VEP   CNS	Diffuse light VEP waveform N3 peak		Patterned VEP waveform, N3 peak	MDC_EVOK_POTL_CRTX_DIFFUSE_LT_VEP_N3_PK	24928
Pattern   EvokedPotential, P3_Peak   Cortex, Diffuse_Light_VEP   CNS	Diffuse light VEP waveform P3 peak		Patterned VEP waveform, P3 peak	MDC_EVOK_POTL_CRTX_DIFFUSE_LT_VEP_P3_PK	24936
Pattern   EvokedPotential, Unspecified   Nerve, Cortex, MedianusOrUlnarisSEP   CNS, PeripheralNervousSystem	Medianus or ulnaris SEP waveform, unspecified		Medianus or ulnaris SEP waveform, unspecified	MDC_EVOK_POTL_NERV_CRTX_MED_ULN_SEP	24944
Pattern   EvokedPotential, N9_Peak   Nerve, Cortex, MedianusOrUlnarisSEP   CNS, PeripheralNervousSystem	Medianus or ulnaris SEP N9 peak		Medianus or ulnaris SEP waveform, N9 peak	MDC_EVOK_POTL_NERV_CRTX_MED_ULN_sep_N9_PK	24952
Pattern   EvokedPotential, N11_Peak   Nerve, Cortex, MedianusOrUlnarisSEP   CNS, PeripheralNervousSystem	Medianus or ulnaris SEP N11 peak		Medianus or ulnaris SEP waveform, N11 peak	MDC_EVOK_POTL_NERV_CRTX_MED_ULN_SEP_N11_PK	24960
Pattern   EvokedPotential, N13_Peak   Nerve, Cortex, MedianusOrUlnarisSEP   CNS, PeripheralNervousSystem	Medianus or ulnaris SEP N13 peak		Medianus or ulnaris SEP waveform, N13 peak	MDC_EVOK_POTL_NERV_CRTX_MED_ULN_SEP_N13_PK	24968
Pattern   EvokedPotential, N20_Peak   Nerve, Cortex, MedianusOrUlnarisSEP   CNS, PeripheralNervousSystem	Medianus or ulnaris SEP N20 peak		Medianus or ulnaris SEP waveform, N20 peak	MDC_EVOK_POTL_NERV_CRTX_MED_ULN_SEP_N20_PK	24976
Pattern   EvokedPotential, P30_Peak   Nerve, Cortex, MedianusOrUlnarisSEP   CNS, PeripheralNervousSystem	Medianus or ulnaris SEP P30 peak		Medianus or ulnaris SEP waveform, P30 peak	MDC_EVOK_POTL_NERV_CRTX_MED_ULN_SEP_P30_PK	24984

**Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   EvokedPotential, P300_Peak   Nerve, Cortex, MedianusOrUlnarisSEP   CNS, PeripheralNervousSystem	Medianus or ulnaris SEP P300 peak		Medianus or ulnaris SEP waveform, P300 peak	MDC_EVOK_POTL_NERV_CRTX_MED_ULN_SEP_P300_PK	24992
Pattern   EvokedPotential, Unspecified   Nerve, Cortex, PeroneusSEP   CNS, PeripheralNervousSystem	Peroneus SEP waveform		Peroneus SEP waveform, unspecified	MDC_EVOK_POTL_NERV_CRTX_PER_SEP	25000
Pattern   EvokedPotential, Lumbar_Peak   Nerve, Cortex, PeroneusSEP   CNS, PeripheralNervousSystem	Peroneus SEP lumbar peak		Peroneus SEP waveform, lumbar peak	MDC_EVOK_POTL_NERV_CRTX_PER_SEP_LUMBAR_PK	25008
Pattern   EvokedPotential, LowThoracic_Peak   Nerve, Cortex, PeroneusSEP   CNS, PeripheralNervousSystem	Peroneus SEP low thoracic peak		Peroneus SEP waveform, low thoracic peak	MDC_EVOK_POTL_NERV_CRTX_PER_SEP_LO_THOR_PK	25016
Pattern   EvokedPotential, HighThoracic_Peak   Nerve, Cortex, PeroneusSEP   CNS, PeripheralNervousSystem	Peroneus SEP high thoracic peak		Peroneus SEP waveform, high thoracic peak	MDC_EVOK_POTL_NERV_CRTX_PER_SEP_HI_THOR_PK	25024
Pattern   EvokedPotential, P27_Peak   Nerve, Cortex, PeroneusSEP   CNS, PeripheralNervousSystem	Peroneus SEP P27 peak		Peroneus SEP waveform, P27 peak	MDC_EVOK_POTL_NERV_CRTX_PER_SEP_P27_PK	25032
Pattern   EvokedPotential, N35_Peak   Nerve, Cortex, PeroneusSEP   CNS, PeripheralNervousSystem	Peroneus SEP N35 peak		Peroneus SEP waveform, N35 peak	MDC_EVOK_POTL_NERV_CRTX_PER_SEP_N35_PK	25040
Pattern   EvokedPotential, P300_Peak   Nerve, Cortex, PeroneusSEP   CNS, PeripheralNervousSystem	Peroneus SEP P300 peak		Peroneus SEP waveform, P300 peak	MDC_EVOK_POTL_NERV_CRTX_PER_SEP_P300_PK	25048
Pattern   EvokedPotential, Unspecified   Nerve, Cortex, TibialisSEP   CNS, PeripheralNervousSystem	Tibialis SEP waveform		Tibialis SEP waveform, unspecified	MDC_EVOK_POTL_NERV_CRTX_TIB_SEP	25056

**Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   EvokedPotential, Popliteal_Peak   Nerve, Cortex, TibialisSEP   CNS, PeripheralNervousSystem	Tibialis SEP popliteal peak		Tibialis SEP waveform, popliteal peak	MDC_EVOK_POTL_NERV_CRTX_TIB_SEP_POPLIT_PK	25064
Pattern   EvokedPotential, Lumbar_Peak   Nerve, Cortex, TibialisSEP   CNS, PeripheralNervousSystem	Tibialis SEP lumbar peak		Tibialis SEP waveform, lumbar peak	MDC_EVOK_POTL_NERV_CRTX_TIB_SEP_LUMBAR_PK	25072
Pattern   EvokedPotential, Thoracic_Peak   Nerve, Cortex, TibialisSEP   CNS, PeripheralNervousSystem	Tibialis SEP thoracic peak		Tibialis SEP waveform, thoracic peak	MDC_EVOK_POTL_NERV_CRTX_TIB_SEP_THOR_PK	25080
Pattern   EvokedPotential, P37_Peak   Nerve, Cortex, TibialisSEP   CNS, PeripheralNervousSystem	Tibialis SEP P37 peak		Tibialis SEP waveform, P37 peak	MDC_EVOK_POTL_NERV_CRTX_TIB_SEP_P37_PK	25088
Pattern   EvokedPotential, N45_Peak   Nerve, Cortex, TibialisSEP   CNS, PeripheralNervousSystem	Tibialis SEP N45 peak		Tibialis SEP waveform, N45 peak	MDC_EVOK_POTL_NERV_CRTX_TIB_SEP_N45_PK	25096
Pattern   EvokedPotential, P300_Peak   Nerve, Cortex, TibialisSEP   CNS, PeripheralNervousSystem	Tibialis SEP P300 peak		Tibialis SEP waveform, P300 peak	MDC_EVOK_POTL_NERV_CRTX_TIB_SEP_P300_PK	25104
Pattern   EvokedPotential, Unspecified   Nerve, Cortex, OtherSEP   CNS, PeripheralNervousSystem	Other SEP waveform		Other SEP waveform, unspecified	MDC_EVOK_POTL_NERV_CRTX_OTH_SEP	25112
Pattern   EvokedPotential, Peak_I   Nerve, Cortex, OtherSEP   CNS, PeripheralNervousSystem	Other SEP Peak I		Other SEP waveform, Peak I	MDC_EVOK_POTL_NERV_CRTX_OTH_SEP_I_PK	25120
Pattern   EvokedPotential, Peak_II   Nerve, Cortex, OtherSEP   CNS, PeripheralNervousSystem	Other SEP Peak II		Other SEP waveform, Peak II	MDC_EVOK_POTL_NERV_CRTX_OTH_SEP_II_PK	25128
Pattern   EvokedPotential, Peak_III   Nerve, Cortex, OtherSEP   CNS, PeripheralNervousSystem	Other SEP Peak III		Other SEP waveform, Peak III	MDC_EVOK_POTL_NERV_CRTX_OTH_SEP_III_PK	25136

**Table A.7.9.1—Nomenclature and codes for neurophysiologic enumerations (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Pattern   EvokedPotential, Peak_IV   Nerve, Cortex, OtherSEP   CNS, PeripheralNervousSystem	Other SEP Peak IV		Other SEP waveform, Peak IV	MDC_EVOK_POTL_NERV_CRTX_OTH_SEP_IV_PK	25144
Pattern   EvokedPotential, Peak_V   Nerve, Cortex, OtherSEP   CNS, PeripheralNervousSystem	Other SEP Peak V		Other SEP waveform, Peak V	MDC_EVOK_POTL_NERV_CRTX_OTH_SEP_V_PK	25152
Pattern   EvokedPotential, P300_Peak   Nerve, Cortex, OtherSEP   CNS, PeripheralNervousSystem	Other SEP P300 peak		Other SEP waveform, P300 peak	MDC_EVOK_POTL_NERV_CRTX_OTH_SEP_P300_PK	25160

**Table A.7.10.1—Nomenclature and codes for neurophysiologic stimulation modes**

Systematic name	Common term	Description/Definition	Reference ID	Code
Type   Stimulus, Click   Cochlea   CNS	Click	Click type stimulus during acoustic evoked potential measurements, short square pulse to ear phone	MDC_STIM_CLICK	53504
Type   Stimulus, FilteredClick   Cochlea   CNS	Filtered click	Filtered click type stimulus during acoustic evoked potential measurements	MDC_STIM_CLICK_FILTER	53505
Type   Stimulus, Pip   Cochlea   CNS	Pip	Pip type stimulus during acoustic evoked potential measurements, sinus wave with defined increase, plateau and decrease	MDC_STIM_PIP	53506
Type   Stimulus, GatedSine   Cochlea   CNS	Gated sine wave	Gated sine type stimulus during acoustic evoked potential measurements, sinus wave switched on for a defined number of cycles	MDC_STIM_SINUSOID_GATE	53507
Side   Stimulus, LeftEar   Cochlea   CNS	Left ear	Target of stimulus during acoustic evoked potential measurement: left ear	MDC_STIM_EAR_LEFT	53508
Side   Stimulus, RightEar   Cochlea   CNS	Right ear	Target of stimulus during acoustic evoked potential measurement: right ear	MDC_STIM_EAR_RIGHT	53509
Side   Stimulus, BothEars   Cochlea   CNS	Both ears	Target of stimulus during acoustic evoked potential measurement: both ears	MDC_STIM_EAR_BOTH	53510
Type   MaskingNoise, LeftEar   Cochlea   CNS	AEP masking, noise, left ear	Masking noise, white noise, presented to contralateral ear to mask out stimulus conducted by bone during acoustic evoked potential measurement: presented to left ear	MDC_STIM_EAR_MASK_AEP_LEFT	53511
Type   MaskingNoise, RightEar   Cochlea   CNS	AEP masking, noise, right ear	Masking noise, white noise, presented to contralateral ear to mask out stimulus conducted by bone during acoustic evoked potential measurement: presented to right ear	MDC_STIM_EAR_MASK_AEP_RIGHT	53512
Type   MaskingNoise, BothEars   Cochlea   CNS	AEP masking, noise, both ears	Masking noise, white noise, presented to contralateral ear to mask out stimulus conducted by bone during acoustic evoked potential measurement: presented to both ears	MDC_STIM_EAR_MASK_AEP_BOTH	53513
Type   Stimulus, Rarefaction   Cochlea   CNS	Rarefaction	Polarity of click stimulus presented to the ear during acoustic evoked potential measurement: rarefaction	MDC_STIM_RAREFAC	53514
Type   Stimulus, Condensation   Cochlea   CNS	Condensation	Polarity of click stimulus presented to the ear during acoustic evoked potential measurement: condensation	MDC_STIM_CONDENS	53515
Type   Stimulus, Alternating   Cochlea   CNS	Alternating	Polarity of click stimulus presented to the ear during acoustic evoked potential measurement: alternating	MDC_STIM_ALTERN	53516

**Table A.7.10.1—Nomenclature and codes for neurophysiologic stimulation modes (continued)**

Systematic name	Common term	Description/Definition	Reference ID	Code
Type   VisualField, NOS   Retina   CNS	VEP visual field, unspecified	Target area of stimulus in visual field during VEP measurement: not specified	MDC_STIM_VIS_FLD	53517
Type   VisualField, Full   Retina   CNS	Full field stimulation	Target area of stimulus in visual field during VEP measurement: full visual field	MDC_STIM_VIS_FLD_FULL	53518
Type   VisualField, Left, Half   Retina   CNS	Left half field stimulation	Target area of stimulus in visual field during VEP measurement: left half of visual field	MDC_STIM_VIS_FLD_HALF_L	53519
Type   VisualField, Right, Half   Retina   CNS	Right half field stimulation	Target area of stimulus in visual field during VEP measurement: right half of visual field	MDC_STIM_VIS_FLD_HALF_R	53520
Type   VisualField, Top, Half   Retina   CNS	Top half field stimulation	Target area of stimulus in visual field during VEP measurement: top half of visual field	MDC_STIM_VIS_FLD_HALF_TOP	53521
Type   VisualField, Bottom, Half   Retina   CNS	Bottom half field stimulation	Target area of stimulus in visual field during VEP measurement: bottom half of visual field	MDC_STIM_VIS_FLD_HALF_BOT	53522
Type   VisualField, Left, Top, Quadrant   Retina   CNS	Left top quadrant field stimulation	Target area of stimulus in visual field during VEP measurement: left top quadrant of visual field	MDC_STIM_VIS_FLD_TOP_QUAD_L	53523
Type   VisualField, Right, Top, Quadrant   Retina   CNS	Right top quadrant field stimulation	Target area of stimulus in visual field during VEP measurement: right top quadrant of visual field	MDC_STIM_VIS_FLD_TOP_QUAD_R	53524
Type   VisualField, Left, Bottom, Quadrant   Retina   CNS	Left bottom quadrant field	Target area of stimulus in visual field during VEP measurement: left bottom quadrant of visual field	MDC_STIM_VIS_FLD_BOT_QUAD_L	53525
Type   VisualField, Right, Bottom, Quadrant   Retina   CNS	Right bottom quadrant field stimulation	Target area of stimulus in visual field during VEP measurement: right bottom quadrant of visual field	MDC_STIM_VIS_FLD_BOT_QUAD_R	53526
Type   Pattern, NOS   Retina   CNS	VEP pattern, unspecified	Pattern type used for stimulation of retina during VEP measurement: unspecified	MDC_STIM_PATT_VEP	53527
Type   Pattern, CheckerBoard   Retina   CNS	Checkerboard	Pattern type used for stimulation of retina during VEP measurement: checkerboard	MDC_STIM_PATT_CHKRBDRD	53528
Type   Pattern, Bar, Horizontally   Retina   CNS	Horizontally oriented bar	Pattern type used for stimulation of retina during VEP measurement: horizontally oriented bar	MDC_STIM_PATT_BAR_HORIZ	53529
Type   Pattern, Bar, Vertically   Retina   CNS	Vertically oriented bar	Pattern type used for stimulation of retina during VEP measurement: vertically oriented bar	MDC_STIM_PATT_BAR_VERT	53530

**Table A.7.10.1—Nomenclature and codes for neurophysiologic stimulation modes (continued)**

Systematic name	Common term	Description/Definition	Reference ID	Code
Type   Pattern, SineWave, Horizontally   Retina   CNS	Horizontally oriented sine wave	Pattern type used for stimulation of retina during VEP measurement: horizontally oriented sine wave	MDC_STIM_PATT_SINUSOID_HORIZ	53531
Type   Pattern, SineWave, Vertically   Retina   CNS	Vertically oriented sine wave	Pattern type used for stimulation of retina during VEP measurement: vertically oriented sine wave	MDC_STIM_PATT_SINUSOID_VERT	53532
Type   Pattern, Windmill   Retina   CNS	Windmill	Pattern type used for stimulation of retina during VEP measurement: windmill	MDC_STIM_PATT_WINDMILL	53533
Type   Pattern, DartBoard   Retina   CNS	Dartboard	Pattern type used for stimulation of retina during VEP measurement: dartboard	MDC_STIM_PATT_DARTBRD	53534
Type   Pattern, Complex   Retina   CNS	Complex pattern	Pattern type used for stimulation of retina during VEP measurement: complex pattern not otherwise specified	MDC_STIM_PATT_CMPLX	53535
Type   Stimulus, NOS   Retina   CNS	VEP stimulus type, unspecified	Type of change in pattern used for stimulation of retina during VEP measurement: unspecified stimulus type	MDC_STIM_VEP	53536
Type   Stimulus, PatternReversal   Retina   CNS	Pattern reversal	Type of change in pattern used for stimulation of retina during VEP measurement: pattern reversal	MDC_STIM_PATT_REVERSAL	53537
Type   Stimulus, Sinusoidally   Retina   CNS	Sinusoidally stimulus	Type of change in pattern used for stimulation of retina during VEP measurement: sinusoidally	MDC_STIM_SINUSOID	53538
Type   Stimulus, Flash   Retina   CNS	Flash stimulus	Type of stimulus used for stimulation of retina during VEP measurement: flash, rapid change in brightness without pattern	MDC_STIM_FLASH	53539
Side   Stimulus, LeftEye   Retina   CNS	Left eye	Side of stimulation during VEP measurement: left eye	MDC_STIM_EYE_LEFT	53540
Side   Stimulus, RightEye   Retina   CNS	Right eye	Side of stimulation during VEP measurement: right eye	MDC_STIM_EYE_RIGHT	53541
Side   Stimulus, BothEyes   Retina   CNS	Both eyes	Side of stimulation during VEP measurement: both eyes	MDC_STIM_EYE_BOTH	53542
Type   Stimulus, Electrical, NOS   Nerve   CNS	Electrical SEP stimulus	Type of electrical stimulus during SEP measurement: not specified	MDC_STIM_SEP_ELEC	53543
Type   Stimulus, Electrical, CurrentLimited   Nerve   CNS	Current limited electrical SEP stimulus	Type of electrical stimulus during SEP measurement: current limited pulse	MDC_STIM_SEP_CURR_LIMITED	53544

**Table A.7.10.1—Nomenclature and codes for neurophysiologic stimulation modes (continued)**

Systematic name	Common term	Description/Definition	Reference ID	Code
Type   Stimulus, Electrical, Voltage   SensoryNerve   CNS	Defined voltage type electrical SEP stimulus	Type of electrical stimulus during SEP measurement: constant voltage pulse	MDC_STIM_SEP_ELEC_VOLTAGE_DEF	53545
Type   Stimulus, NonElectrical, NOS   SensoryNerve   CNS	Non electrical SEP stimulus	Type of non electrical stimulus during SEP measurement: not specified	MDC_STIM_SEP_NON_ELEC	53546
Type   Stimulus, NonElectrical, Vibration   SensoryNerve   CNS	Vibration type SEP stimulus	Type of non electrical stimulus during SEP measurement: vibration of mechanical stimulator	MDC_STIM_SEP_VIB	53547
Type   Stimulus, NonElectrical, Temperature   SensoryNerve   CNS	Temperature type SEP stimulus	Type of nonelectrical stimulus during SEP measurement: change of temperature of stimulator	MDC_STIM_SEP_TEMP	53548
Side   Stimulus, Unilateral, Left   SensoryNerve   CNS	Left unilateral	Side of stimulation during SEP measurement: unilateral left	MDC_STIM_UNILAT_L	53549
Side   Stimulus, Unilateral, Right   SensoryNerve   CNS	Right unilateral	Side of stimulation during SEP measurement: unilateral right	MDC_STIM_UNILAT_R	53550
Side   Stimulus, Bilateral   SensoryNerve   CNS	Bilateral	Side of stimulation during SEP measurement: bilateral	MDC_STIM_BILAT	53551
Type   Stimulus, MagneticField   MotoricCortex   CNS	Magnetic type MEP Stimulus	Type of stimulus used during motoric evoked potential measurement: magnetic field by condenser discharge to coil	MDC_STIM_MEPMAG	53552
Type   Stimulus, HighVoltage   MotoricCortex   CNS	High voltage type MEP stimulus	Type of stimulus used during motoric evoked potential measurement: high-voltage pulse applied outside skull	MDC_STIM_MEPHI_VOLT	53553

**Table A.9.2.1—Nomenclature and codes for pattern events**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
ErrorEvent   Heart, Rate, Irregular   Heart, ECG   CVS	Irregular heart rate		Error Event: Irregular heart rate (which means the beat detector finds a highly variable heart rate and cannot derive a consistent/stable value)	MDC_EVT_ECG_CARD_BEAT_RATE_IRREG	3158
LimitEvent   Apnea     Respiration	Apnea		No breathing within a pre-configured time span	MDC_EVT_APNEA	3072
LimitEvent   Apnea, Pressure     Respiration	Apnea		Apnea - pressure absent for 15 seconds	MDC_EVT_VENT_RESP_APNEA_15_SEC	3284
LimitEvent   Apnea, VolumeExhale     Respiration	Apnea		Apnea - no volume exhale for 30 seconds	MDC_EVT_VENT_RESP_APNEA_30_SEC	3292
LimitEvent   AssistedSpontBreathing     Respiration	ASB > x sec		Assisted spontaneous breathing longer than a predefined time span (PSW)	MDC_EVT_RESP_BREATHING_SPONT_ASSIST_PSW	3278
LimitEvent   Bradycardia, Extreme   Heart, ECG   CVS	Extreme bradycardia		Limit Event: Extreme Bradycardia (escalated low HR limit, not a brady rhythm)	MDC_EVT_ECG_BRADY_EXTREME	3086
LimitEvent   Concentration, Oxygen, Desaturation     Respiration	Desaturation		Limit Event: Desaturation (escalated low oxygen alarm, used esp. in neonatal)	MDC_EVT_DESAT	3246
LimitEvent   Extrasystoles, Contraction, Ventricular, Premature, HighLimit   Heart, ECG   CVS	PVC rate alarm		A specific limit alert on the PVC rate	MDC_EVT_ECG_V_P_C_RATE	3252
LimitEvent   Rhythm, Asystole   Heart, ECG   CVS	Asystole		No QRS-complex found in predefined time period	MDC_EVT_ECG_ASYSTOLE	3076
LimitEvent   Tachycardia, Extreme   Heart, ECG   CVS	Extreme tachycardia		Limit Event: Extreme Tachycardia (escalated high HR limit, not a tachy rhythm)	MDC_EVT_ECG_TACHY_EXTREME	3122
PatternEvent     Heart, ECG   CVS	Arrhythmia event		Unspecified ECG (arrhythmia) event	MDC_EVT_ECG_ARRHY	3266
PatternEvent   Extrasystoles, Contraction, Atrial, Premature   Heart, ECG   CVS	PAC		Premature atrial contraction	MDC_EVT_ECG_ATR_P_C	3130
PatternEvent   Discharge, ClinicalSeizure   Cortex, EEG   CNS	Clinical seizure discharge		Clinical seizure discharge in EEG	MDC_EVT_EEG_DISCHG_SEIZ_CLIN	3264
PatternEvent   Discharge, Epileptiform   Cortex, EEG   CNS	Epileptiform discharges		Epileptiform discharges in EEG	MDC_EVT_EEG_DISCHG_EPILEPTIFORM	3268

Table A.9.2.1—Nomenclature and codes for pattern events (continued)

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
PatternEvent   Extrasystoles, Contraction, SupraVentricular, Premature   Heart, ECG   CVS		SPVC	Supraventricular extrasystole	MDC_EVT_ECG_SV_P_C	3190
PatternEvent   Extrasystoles, Contraction, SupraVentricular, Premature, Frequent   Heart, ECG   CVS		FSPVC	Frequent supraventricular extrasystoles	MDC_EVT_ECG_SV_P_C_FREQ	3290
PatternEvent   Extrasystoles, Contraction, SupraVentricular, Premature, Run   Heart, ECG   CVS		RUN S	Several consecutive supraventricular extrasystoles	MDC_EVT_ECG_SV_P_C_RUN	3248
PatternEvent   Extrasystoles, Contraction, Ventricular, Premature   Heart, ECG   CVS		PVC	Premature ventricular contraction	MDC_EVT_ECG_V_P_C	3204
PatternEvent   Extrasystoles, Contraction, Ventricular, Premature, Frequent   Heart, ECG   CVS		FPVC	Frequent premature ventricular contractions	MDC_EVT_ECG_V_P_C_FREQ	3274
PatternEvent   Extrasystoles, Contraction, Ventricular, Premature, Multiformed   Heart, ECG   CVS		MFPVC	Multiformed premature ventricular contractions	MDC_EVT_ECG_V_P_C_MULTIFORM	3208
PatternEvent   Extrasystoles, Contraction, Ventricular, Premature, R-on-T   Heart, ECG   CVS		RTPVC	Premature ventricular contraction, R-on-T	MDC_EVT_ECG_V_P_C_RonT	3206
PatternEvent   Extrasystoles, Contraction, Ventricular, Premature, Run   Heart, ECG   CVS		RUN V	Several consecutive ventricular extrasystoles	MDC_EVT_ECG_V_P_C_RUN	3212
PatternEvent   Extrasystoles, Contraction, Ventricular, Premature, Pair   Heart, ECG   CVS	Pair of PVCs		Pair of premature ventricular contractions	MDC_EVT_ECG_V_P_C_PAIR	3210
PatternEvent   Extrasystoles, Contraction, Ventricular, Premature, Run, Escalation   Heart, ECG   CVS	Escalation of run of PVC		Ventricular rhythm: escalation of Run of PVC, not yet flutter	MDC_EVT_ECG_V_RHY	3220

Table A.9.2.1—Nomenclature and codes for pattern events (continued)

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
PatternEvent   Extrasystoles, Ventricular, Bigeminus   Heart, ECG   CVS	Ventricular bigemini		Ventricular bigemini: a specific rhythm	MDC_EVT_ECG_BIGEM	3082
PatternEvent   Extrasystoles, Ventricular, Trigeminus   Heart, ECG   CVS	Ventricular trigemini		Ventricular trigemini: a specific rhythm	MDC_EVT_ECG_V_TRIGEM	3236
PatternEvent   MissedBeat   Heart, ECG   CVS	Missed beat		Missed beat within some regular ECG rhythm	MDC_EVT_ECG_BEAT_MISSED	3078
PatternEvent   Pacer, Artifact   Heart, ECG   CVS	Pacer artifact		Pacer artifact recognized	MDC_EVT_ECG_PACER_ARTIF_REC	3294
PatternEvent   Pacer, Error   Heart, ECG   CVS	Not paced		No pacer detected	MDC_EVT_ECG_PACER_ABSENT	3286
PatternEvent   Pacer, NotCaptured   Heart, ECG   CVS		PACENC	Pacer not captured (not recognized by heart)	MDC_EVT_ECG_PACING_NON_CAPT	3102
PatternEvent   Pacer, NotSensing   Heart, ECG   CVS		PACENS	Pacer (device) not sensing	MDC_EVT_ECG_PACER_NOT_PACING	3182
PatternEvent   Pacer, Sensed   Heart, ECG   CVS	Pacing event		Pacer pulse sensed by heart	MDC_EVT_ECG_PACED_BEAT	3096
PatternEvent   Rhythm, Atrial, Tachycardia   Heart, ECG   CVS	ATACH		Atrial tachycardia	MDC_EVT_ECG_ATR_TACHY	3136
PatternEvent   Rhythm, AV_Block, 2:1   Heart, ECG   CVS	2:1BLK		2:1 AV block	MDC_EVT_ECG_AV_HEART_BLK_DEG_2_1	3280
PatternEvent   Rhythm, AV_Block, 3:1   Heart, ECG   CVS	3:1BLK		3:1 AV block	MDC_EVT_ECG_AV_HEART_BLK_DEG_3_1	3282
PatternEvent   Rhythm, AV_Block, 4:1   Heart, ECG   CVS	4:1BLK		4:1 AV block	MDC_EVT_ECG_AV_HEART_BLK_DEG_4_1	3288
PatternEvent   Rhythm, AV_Block, Grade1   Heart, ECG   CVS	1AVBLK		AV block 1.*	MDC_EVT_ECG_AV_HEART_BLK_DEG_1	3146
PatternEvent   Rhythm, AV_Block, Grade2   Heart, ECG   CVS	2AVBLK		AV block 2.*	MDC_EVT_ECG_AV_HEART_BLK_DEG_2	3148

Table A.9.2.1—Nomenclature and codes for pattern events (continued)

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
PatternEvent   Rhythm, AV_Block, Grade3   Heart, ECG   CVS	3AVBLK		AV block 3. <sup>o</sup>	MDC_EVT_ECG_AV_HEART_BLK_DEG_3	3258
PatternEvent   Rhythm, Bradycardia   Heart, ECG   CVS		BRADY	Bradycardia	MDC_EVT_ECG_SINUS_BRADY	3084
PatternEvent   Rhythm, Couplet   Heart, ECG   CVS		CPLT	Couplet	MDC_EVT_ECG_RHY_CPLT	3272
PatternEvent   Rhythm, Fibrillation, Atrial   Heart, ECG   CVS		AFIB	Atrial fibrillation	MDC_EVT_ECG_ATR_FIB	3128
PatternEvent   Rhythm, Fibrillation, Ventricular   Heart, ECG   CVS		VFIB	Ventricular fibrillation	MDC_EVT_ECG_V_FIB	3198
PatternEvent   Rhythm, Flutter, Atrial   Heart, ECG   CVS		AFLT	Atrial flutter	MDC_EVT_ECG_ATR_FLUT	3276
PatternEvent   Rhythm, Irregular   Heart, ECG   CVS		IRREG	Irregular rhythm	MDC_EVT_ECG_RR_IRREG	3118
PatternEvent   Rhythm, Junctional   Heart, ECG   CVS		JRHYT	Junctional rhythm	MDC_EVT_ECG_JUNC_RHY	3260
PatternEvent   Rhythm, Tachycardia, Junctional   Heart, ECG   CVS		JTACH	Junctional tachycardia	MDC_EVT_ECG_JUNC_TACHY	3172
PatternEvent   Rhythm, Tachycardia, Paroxysmal, SupraVentricular   Heart, ECG   CVS		PSVT	Paroxysmal supraventricular tachycardia	MDC_EVT_ECG_JUNC_TACHY_PAROX	3174
PatternEvent   Rhythm, Tachycardia, Sinus   Heart, ECG   CVS		STACH	Sinus tachycardia	MDC_EVT_ECG_SINUS_TACHY	3262
PatternEvent   Rhythm, Tachycardia, SupraVentricular   Heart, ECG   CVS	Supraventricular tachycardia		Supraventricular tachycardia	MDC_EVT_ECG_SV_TACHY	3192
PatternEvent   Rhythm, Tachycardia, Ventricular   Heart, ECG   CVS		VTACH	Ventricular tachycardia	MDC_EVT_ECG_V_TACHY	3224
PatternEvent   SharpSpikes   Cortex, EEG   CNS	Sharp spikes		Sharp spikes in EEG	MDC_EVT_EEG_SPK_SHARP	3270

Table A.9.2.1—Nomenclature and codes for pattern events (continued)

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
PatternEvent   SpikeAndWaves   Cortex, EEG   CNS	Spikes and waves		Spikes and waves in EEG	MDC_EVT_EEG_SPK_AND_WV	3254
PatternEvent   Volume, NotConstant     Respiration	Vol inconst		Breathing volume not constant	MDC_EVT_RESP_VOL_BREATHING_IRREG	3256
Status   BreathSpontaneous     Ventilator	Spontaneous		Spontaneous breath of the patient, e.g., during weaning	MDC_EVT_STAT_VENT_BREATH_SPONT	20576
Status   MachineGeneratedBreath     Ventilator	Machine generated		Machine generated breath of the patient, e.g., during weaning	MDC_EVT_STAT_VENT_BREATH_MAND	20580
Status   Pacer, Paced   Heart, ECG   CVS	Paced		Pacer operational and controlling heart rhythm	MDC_EVT_STAT_ECG_PACING	3098

**Table A.9.3.1—Nomenclature and codes for device-related and environment-related events**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Advisory   Agent, VaporIris, CalibrationNecessary   FunctionalStatus   Ventilator	Agent vapor iris calibration necessary		The mixing iris in agent vaporizer in an ventilator must be checked (anesthesia machine).	MDC_EVT ADVISED_VENT_MIX_IRIS_CALIB	6726
Advisory   AirSupply, CheckingNecessary   FunctionalStatus   Ventilator	Check air supply	FRESH GAS	Checking of ventilator air supply is necessary.	MDC_EVT ADVISED_VENT_AIR_SUPP_CHK	6728
Advisory   Battery, ConditioningRequired   FunctionalStatus   Device	Battery conditioning required		Advisory: Condition Battery (battery needs a special "condition" charge cycle for full capacity.)	MDC_EVT ADVISED_BATT_COND	6676
Advisory   Battery, NeedsReplacement   FunctionalStatus   Device	Battery needs replacement		Advisory: Replace Battery (a full charge is now a too small fraction of the original capacity, or this is not a rechargeable battery that is close to empty.)	MDC_EVT ADVISED_BATT_REPLACE	6678
Advisory   Calibration, CheckingNecessary   FunctionalStatus   Device	Calibration checking necessary		Advisory: Check Calibration/Zero (system is not sure if calibration data is still ok.)	MDC_EVT ADVISED_CALIB_AND_ZERO_CHK	6664
Advisory   CO <sub>2</sub> , Failure   FunctionalDisturbance   Device	CO <sub>2</sub> failure		Failure occurred in a carbon-dioxide-measuring device.	MDC_EVT CO2_MSMT_FAIL	462
Advisory   CO <sub>2</sub> Sensor, Fault   FunctionalDisturbance   Device	CO <sub>2</sub> sensor fault		Fault occurred in carbon dioxide sensor disc.	MDC_EVT CO2_SENSOR_FAIL	464
Advisory   CO <sub>2</sub> Window, Occluded   FunctionalDisturbance   Device	CO <sub>2</sub> window occluded		Carbon dioxide measurement window in a carbon-dioxide-measuring device is occluded.	MDC_EVT CO2_WIND_OBSTRU	216
Advisory   ExpirationValve, CheckingNecessary   FunctionalStatus   Ventilator	Check expiration valve	EXP-VALVE	Checking of expiration valve is necessary.	MDC_EVT ADVISED_VENT_EXP_VALVE_CHK	6730
Advisory   Flow, CalibrationNecessary   FunctionalStatus   Ventilator	Flow calibration necessary		Flow calibration of ventilator is necessary.	MDC_EVT ADVISED_VENT_FLOW_CALIB	6724
Advisory   FlowSensor, CheckingNecessary   FunctionalStatus   Ventilator	Flow sensor checking necessary		Checking of flow sensor in a ventilator is necessary.	MDC_EVT ADVISED_VENT_FLOW_SENSOR_CHK	6722

**Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Advisory   GainAdjustmentRequired   FunctionalStatus   Device	Gain adjustment required		Advisory: Decrease Gain (system asks user to decrease the gain; this advisory is different from the overrange error, ErrorEvent, that already is in the nomenclature; it is an "advisory.")	MDC_EVT ADVISED_GAIN_DECR	6704
Advisory   Line, Flow, Resistance   FunctionalDisturbance   Pump	Resistance warning	FRW	Flow resistance warning	MDC_EVT FLOW_FLUID_LINE_RES_WARN	582
Advisory   Log, CheckingNecessary   FunctionalStatus   Device	Check system error log		Advisory: Check Log (a fatal system error was entered in a log object and should be read.)	MDC_EVT ADVISED_STATUS_LOG_CHK	6698
Advisory   PAW, CheckingNecessary   FunctionalStatus   Ventilator	PAW checking necessary		Checking of airway pressure in a ventilator is necessary.	MDC_EVT ADVISED_VENT_PRESS_AWAY_CHK	6720
Advisory   Sensor, CheckingNecessary   FunctionalDisturbance   Device	Check sensor		The sensor must be checked.	MDC_EVT ADVISED_SENSOR_CHK	6696
Advisory   Vaporizer, CheckingNecessary   FunctionalStatus   Ventilator	Vaporizer checking necessary	CHECK VAPOR	Vaporizer is not connected, not known or not allowed.	MDC_EVT ADVISED_VAPORIZER_CHK_DISCONN	6718
Advisory   Volume, Syringe, PreAlarm   Handling   Pump	Syringe pre-alarm (x min)		Syringe needs to be replaced soon.	MDC_EVT ADVISED_PUMP_SYRINGE_REPLACE_WARN	6712
Advisory   WaterTrap, CheckingNecessary   FunctionalStatus   Ventilator	Water trap checking necessary	WATER TRAP	Checking of water trap in a ventilator is necessary.	MDC_EVT ADVISED_VENT_WATER_TRAP_CHK	6716
ErrorEvent     FunctionalDisturbance   Device	Equipment error		Unspecified device error	MDC_EVT_EQU	28
ErrorEvent     Handling   Device	Handling problem		Not specified, unnormal handling of a device, device component, cabling, or transducer	MDC_EVT_HANDL_ERR	152
ErrorEvent     Processing   Device	Processing error		Unspecified processing error	MDC_EVT_PROC_ERR	162
ErrorEvent   Abnormal   FunctionalDisturbance   Device	Abnormal		Abnormal condition detected	MDC_EVT_ABNORM	2
ErrorEvent   Absent   Processing   Device	Absent		Absent	MDC_EVT_ABSENT	4

Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
ErrorEvent   Agent, NotSelected   FunctionalDisturbance   Ventilator	Agent not selected	AGT NOT SEL		MDC_EVT_VENT_GAS_AGENT_NOT_SELECTED	516
ErrorEvent   Agent, Vaporiris, Inoperable   FunctionalDisturbance   Ventilator	Agent vapor iris inoperable	A-VAP ERR	Gaseous agent mixing iris is inoperable in a ventilator (anesthesia).	MDC_EVT_VENT_MIX_IRIS_INOP	528
ErrorEvent   Airway, Temperature, HighLimit   FunctionalDisturbance   Ventilator	High airway temperature	AW-TEMP HIGH	Airway temperature is too high (ventilator).	MDC_EVT_VENT_TEMP_AWAY_HI	504
ErrorEvent   Battery   FunctionalDisturbance   Device	Battery problem		Unspecified battery problem	MDC_EVT_BATT_PROB	198
ErrorEvent   Battery, Low   FunctionalDisturbance   Device	Battery low or dead		Battery discharged or is defective.	MDC_EVT_BATT_LO	194
ErrorEvent   BreathingSystem, Stopped   FunctionalDisturbance   Ventilation	Breath absent		Error Event: Breath Absent (this is not apnea, but a technical ventilator event.)	MDC_EVT_BREATH_ABSENT	136
ErrorEvent   BreathingSystem, Vented   FunctionalDisturbance   Ventilator	Breathing system vented		Breathing system is vented.	MDC_EVT_VENT_BREATHING_SYS_VENTED	532
ErrorEvent   Calibration   FunctionalDisturbance   Device	Calibration error		Calibration is not successful.	MDC_EVT_CALIB_FAIL	138
ErrorEvent   CO <sub>2</sub> , SensorLine, Blocked   FunctionalDisturbance   Ventilator	Blocked CO <sub>2</sub> sensor line	CO <sub>2</sub> LINE BLK		MDC_EVT_VENT_CO2_SENSOR_LINE_OBSTRUC	536
ErrorEvent   CO <sub>2</sub> Absorber , Exhausted   FunctionalDisturbance   Ventilator	Exh. CO <sub>2</sub> absorber		Exhausted carbon dioxide absorber	MDC_EVT_VENT_CO2_ABSORB_EXH	534
ErrorEvent   Coincidence, Heart, Respiration   SignalQuality   Device	Pulse rate coincidence		Heart rate and respiration rate are reported to be the same value.		3296
ErrorEvent   Configuration   Processing   Device	Configuration error		Device configuration: combination is not valid.	MDC_EVT_CONFIG_ERR	142
ErrorEvent   Contaminated   FunctionalDisturbance   Device	Contaminated		Contaminated	MDC_EVT_CONTAM	14

Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
ErrorEvent   Cooling, Inoperable   FunctionalDisturbance   Ventilator	Vent cooling INOP	COOLING INOP	Ventilator device temperature is too high.	MDC_EVT_VENT_TEMP_HI	540
ErrorEvent   Cuff, Disconnected   FunctionalDisturbance   Device	Cuff disconnected	CUFF ERR	Cuff is disconnected or leaking, e.g., in NIBP.	MDC_EVT_NBP_CUFF_DISCONNECTED_OR_LEAK	456
ErrorEvent   Cuff, Motions   FunctionalDisturbance   Device	Motions detected	MOTIONS	Motions are detected, e.g., in NIBP measurement.	MDC_EVT_NBP_MOTION_DETECT	454
ErrorEvent   DataAcquisition   Communication   Device	Data acquisition error		Unspecified problem in data acquisition	MDC_EVT_DATA_ACQN_ERR	482
ErrorEvent   DataSemantics   Communication   Device	Erratic data		Subsystem has received false data packet.	MDC_EVT_MSG_SEMAN_ERR	470
ErrorEvent   DataSyntax   Communication, Message   Device	Corrupt data		Subsystem has received false data packet.	MDC_EVT_MSG_CORRUPT	452
ErrorEvent   Defect   FunctionalDisturbance   Device	Defect		Defect is detected in a device, sensor, etc.	MDC_EVT_DEFECT	16
ErrorEvent   Disconnection   FunctionalDisturbance   Device	Disconnection		Disconnection, e.g., in sampling line	MDC_EVT_DISCONN	22
ErrorEvent   Disconnection   Handling   Ventilator	Ventilator disconnected		Patient is disconnected from ventilator.	MDC_EVT_VENT_DISCONN	564
ErrorEvent   Disconnection, <location>   FunctionalDisturbance   Ventilator	Disconnection		Disconnection of parts in a ventilator, e.g., disconnection in FGF hose	MDC_EVT_VENT_COMPONENT_DISCONN	542
ErrorEvent   Disturbed   SignalQuality   Device	Disturbed		Signal is disturbed.	MDC_EVT_DISTURB	24
ErrorEvent   ECG, Lead, Disconnected   FunctionalDisturbance   Device	ECG lead disconnected		Error Event: (ECG) Lead Disconnected (specialized form of the generic disconnect event. In case of ECG, some ECG devices reconstruct leads when a single lead of a multilead cable falls off. This needs a special user notification, because the situation might not be visible on the display waves. Reasoning: see above.)	MDC_EVT_LEAD_DISCONNECTED	268
ErrorEvent   ElectricalPower   FunctionalDisturbance   Device	Power problem		Electric power line: unspecified problem	MDC_EVT_ELEC_PWR_LINE_PROB	236

**Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
ErrorEvent   Empty   FunctionalDisturbance   Device	Empty		A reservoir, etc., is empty	MDC_EVT_EMPTY	26
ErrorEvent   Enclosure, Open   Handling   Device	Door open		A door or handle, which must be closed for operation, is open.	MDC_EVT_DOOR_POSN_ERR	476
ErrorEvent   Erratic   Processing   Device	Erratic		Erratic condition is detected.	MDC_EVT_ERRATIC	32
ErrorEvent   Exhausted   FunctionalDisturbance   Device	Exhausted		Exhausted	MDC_EVT_EXH	36
ErrorEvent   Failed   FunctionalDisturbance   Device	Failed		An action, data transmission, etc., failed.	MDC_EVT_FAIL	38
ErrorEvent   GasMixer, Inoperable   FunctionalDisturbance   Ventilator	Inoperable gas mixer		Gas mixer is inoperable.	MDC_EVT_VENT_GAS_MIXER_INOP	544
ErrorEvent   GasSupply   FunctionalDisturbance   Ventilator	Med air/gas/ vacuum problem		Problem with gas lines to/from breathing system	MDC_EVT_VENT_GAS_LINE_PROB	548
ErrorEvent   Humidity, High   Handling   Environment	Humidity unacceptable		Too much humidity for accurate measurement	MDC_EVT_HUMID_EXCESS	490
ErrorEvent   Incorrect   Processing   Device	Incorrect		Incorrect result of a calculation, e.g., CRC in data transmission, of a data structure, etc., detected	MDC_EVT_INCORRECT	46
ErrorEvent   Inoperable   FunctionalDisturbance   Device	Inoperable	INOP	(Un)intentional inoperable condition	MDC_EVT_INOP	52
ErrorEvent   Inoperable   FunctionalDisturbance   Ventilator	INOP		Example: gas mixer inoperable	MDC_EVT_VENT_INOP	550
ErrorEvent   Interrupted   Processing   Device	Interrupted		A measurement, process, or data transmission was interrupted.	MDC_EVT_INTERRUPT	56
ErrorEvent   InvalidOperation   Handling   Device	Invalid operation		Unspecified handling error	MDC_EVT_OP_INVALID	406
ErrorEvent   Incompatible   Processing   Device	Incompatible		Incompatibility of nomenclature or processing component, etc.	MDC_EVT_INCOMPAT	600

**Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
ErrorEvent   Irregular   Processing   Device	Irregular		Irregular rhythm or waveform in a signal, etc.	MDC_EVT_IRREG	58
ErrorEvent   Leak   FunctionalDisturbance   Ventilator	Leak detected		Leak in breathing system	MDC_EVT_VENT_BREATHING_SYS_LEAK	552
ErrorEvent   Leakage   FunctionalDisturbance   Device	Leakage		Leakage in a gas or fluid filled system detected	MDC_EVT_LEAK	60
ErrorEvent   Line, Air   FunctionalDisturbance   Pump	Air in line		Air in fluid line	MDC_EVT_FLUID_LINE_AIR	592
ErrorEvent   Line, DripCounter, Malfunction   FunctionalDisturbance   Pump	Drip alarm		Error in drip counting measurement	MDC_EVT_FLUID_LINE_DRIP_MALF	346
ErrorEvent   Line, Flow, Disturbance   FunctionalDisturbance   Pump	Flow disturbance	FD	Flow disturbance	MDC_EVT_FLUID_LINE_DISTURB	244
ErrorEvent   Line, Flow, Occlusion   FunctionalDisturbance   Pump	Occlusion		Occlusion of fluid line	MDC_EVT_FLUID_LINE_OCCL	332
ErrorEvent   Line, FlowSensor, Malfunction   FunctionalDisturbance   Pump	Flow sensor problem	FSP	Flow sensor problem	MDC_EVT_SENSOR_PROB	312
ErrorEvent   Line, Infiltration   FunctionalDisturbance   Pump	Line infiltration	INFIL	Infiltration of fluid line	MDC_EVT_FLUID_LINE_INFILT	246
ErrorEvent   Lost   Communication   Device	Lost communication		Error Event: Communication Lost	MDC_EVT_COMM_LOST	140
ErrorEvent   Lost   Processing   Device	Lost		Signal or synchronization, etc., was lost.	MDC_EVT_LOST	68
ErrorEvent   Malfunction   FunctionalDisturbance   Device	Malfunction		Malfunction of a device, VMD, or sensor is detected.	MDC_EVT_MALF	70
ErrorEvent   Material, Low   Handling   Device	Material supply low or out		Unspecified tools or agents (e.g., calibration fluids) are low.	MDC_EVT_MATERIAL_LOW_OR_OUT	408
ErrorEvent   MaximumRate, Syringe, UserInput, HighLimit   Handling   Pump	User request error		User keyboard input is higher than available with syringe type (pump).	MDC_EVT_USER_INPUT_DATA_VAL_ERR_HI	568

**Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
ErrorEvent   Measurement   Processing   Device	Error in analyzing metric		Unspecified error in processing of a biosignal	MDC_EVT_MSMT_ERR	354
ErrorEvent   Measurement, Disconnected   FunctionalDisturbance   Device	Measurement unplugged		Error Event: Measurement Unplugged (e.g., in modular patient monitor. Reasoning: In contrast to the disconnect events below, this event indicates that a measurement module was manually (==voluntarily) removed. Dependent on the alarm configuration of a monitor (specifically, with latched alarms), this condition must be announced to the user, and the user must specifically acknowledge the situation.)	MDC_EVT_MSMT_DISCONN	352
ErrorEvent   Measurement, Failed   FunctionalDisturbance   Device	Measurement failed		Error Event: Measurement Failed (e.g., a noninvasive blood pressure)	MDC_EVT_MSMT_FAIL	356
ErrorEvent   Measurement, Interrupted   FunctionalDisturbance   Device	Measurement interrupted		Error Event: Measurement Interrupted (e.g., a noninvasive blood pressure) (there is a generic interrupted code for processing; however, this code does not have to do with processing. As an example of this code, the user might simply hit a stop button, and this action makes the measurement invalid.)	MDC_EVT_MSMT_INTERRUPT	362
ErrorEvent   Measurement, Overrange   Processing   Device	Measurement range exceeded		Error Event: Measurement Range Exceeded, i.e., the signal is out of the physiological range that is specified in the Metric object.	MDC_EVT_MSMT_RANGE_OVER	364
ErrorEvent   Measurement, Light, Interference   FunctionalDisturbance   Device	Light interference with measurement		Error Event: Light Interference (SpO <sub>2</sub> measurement, special kind of interference)	MDC_EVT_LIGHT_INTERF	278
ErrorEvent   NIBP, Cuff, ImproperlyPlaced   SignalQuality   Device	Cuff improperly placed	NIBP_CUFF_ERP		MDC_EVT_CUFF_POSN_ERR	430
ErrorEvent   Noisy   SignalQuality   Device	Noisy		Signal is noisy.	MDC_EVT_NOISY	74
ErrorEvent   Nomenclature   Communication   Device	Nomenclature error		A message contains wrong code.	MDC_EVT_MSG_NOM_ERR	402
ErrorEvent   O <sub>2</sub> , Inspiratory, Inoperable   FunctionalDisturbance   Ventilator	Inoperable inspiratory O <sub>2</sub> measurement			MDC_EVT_VENT_PRESS_O2_INSP_INOP	546

**Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
ErrorEvent   Obstruction   FunctionalDisturbance   Ventilator	Obstruction		Example: obstruction of the endotracheal tube	MDC_EVT_VENT_ENDOTRACH_TUBE_OBSTRUC	508
ErrorEvent   Occlusion   FunctionalDisturbance   Ventilator	Occlusion		Example: occlusion of the endotracheal tube	MDC_EVT_VENT_ENDOTRACH_TUBE_OCCL	538
ErrorEvent   Overflowed   Processing   Device	Overflowed		Overflow was detected in a measurement or calculation.	MDC_EVT_OVERFLOW	90
ErrorEvent   Position, Module   Handling   Device	Component positioning problem		Irregular position of a plug-in device	MDC_EVT_POSN_PROB	160
ErrorEvent   PowerSupply   FunctionalDisturbance   Device	Power problem		Problem in power supply	MDC_EVT_POWER_SUPPLY_PROB	458
ErrorEvent   Protocol, Version   Communication, Message   Device	Version mismatch		Communication error: unknown software version	MDC_EVT_SW_VER_UNK	322
ErrorEvent   QualityOfService   Communication   Device	Quality of service		Unspecified quality of service event	MDC_EVT_SVC_QUALITY	180
ErrorEvent   RecordingPaper, Low   Handling   Device	Paper low or out		Problem with recording paper subdevice	MDC_EVT_ADVIS_REC_PAPER_REPLACE	6694
ErrorEvent   ResourceUnavailable   FunctionalDisturbance   Device	Resource unavailable		A resource is not available.	MDC_EVT_FUNC_UNAVAIL	146
ErrorEvent   MultipleReplyUnavailable   FunctionalDisturbance   Device	Multiple reply unavailable		The multiple reply remote operation function is not available (see Clause 6 in ISO/IEEE 11073-20101)	MDC_EVT_MULT_REPLY_UNAVAIL	602
ErrorEvent   Sensor, Disconnected   FunctionalDisturbance   Device	Sensor disconnected		Sensor disconnection or fault	MDC_EVT_SENSOR_DISCONNECT	308
ErrorEvent   ShortCircuit   FunctionalDisturbance   Device	Short circuit		A short circuit was detected in a VMD.	MDC_EVT_CKT_SHORT	208
ErrorEvent   StateMachine, Recoverable   Communication   Device	State machine error, recoverable		Recoverable state machine error in communication	MDC_EVT_RECOV_ERR	130

**Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
ErrorEvent   StateMachine, Unrecoverable   Communication   Device	State machine error, unrecoverable		Unrecoverable state machine error in communication	MDC_EVT_UNRECOV_ERR	134
ErrorEvent   Stuck   FunctionalDisturbance   Ventilator	Stuck		Example: the expiratory valve is stuck.	MDC_EVT_VENT_EXP_VALVE_STUCK	522
ErrorEvent   Synchronization, ReceiverOverrun   Communication, Message   Device	Real-time overrun		Communication timing error: receiver overrun	MDC_EVT_SYNCH_ERR_RCV_OVRUN	182
ErrorEvent   Synchronization, Inoperable   FunctionalDisturbance   Ventilator	Vent sync INOP		Ventilator synchronization inoperable	MDC_EVT_VENT_SYNCH_INOP	518
ErrorEvent   Synchronization, BufferOverflow   Communication, Message   Device	Buffer overflow		Communication timing error: buffer overflow	MDC_EVT_BUFF_OVERFLOW	502
ErrorEvent   Synchronization, Framing   Communication, Message   Device	Framing error		Communication error: framing error	MDC_EVT_FRAM_ERR	472
ErrorEvent   Synchronization, Parity   Communication, Message   Device	Parity error		Communication error: parity error	MDC_EVT_PARITY_ERR	474
ErrorEvent   Syntax, Protocol   Communication, Message   Device	Unanalyzable data		Undefined communication message syntax	MDC_EVT_MSG_SYNTAX_UNDEF	478
ErrorEvent   Temperature, High   Room   Environment	Temperature unacceptable high		Abnormal high environmental temperature	MDC_EVT_TEMP_ENVIRON_HI_ABNORM	488
ErrorEvent   Temperature, HighLimit   FunctionalDisturbance   Ventilator	High ventilator temperature		Respirator device temperature is too high.	MDC_EVT_RESPIRATOR_TEMP_HI	514
ErrorEvent   Temperature, Low   Room   Environment	Temperature unacceptable low		Abnormal low environmental temperature	MDC_EVT_TEMP_ENVIRON_LOW_ABNORM	486
ErrorEvent   Timing   Processing   Device	Timing error		Unspecified timing error	MDC_EVT_TIMING	414

**Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
ErrorEvent   Timing, Synchronization   Processing   Device	Synchronization error		Error in time synchronization	MDC_EVT_SYNCH_ERR	182
ErrorEvent   Transducer   FunctionalDisturbance   Device	Transducer/electrode problem		Transducer malfunctioning	MDC_EVT_XDUCR_MALF	338
ErrorEvent   Transducer, Disconnected   FunctionalDisturbance   Device	Transducer disconnected		Error Event: Transducer Disconnected (specialized form of the generic disconnect event for measurements with intelligent exducer).	MDC_EVT_XDUCR_DISCONN	336
ErrorEvent   Unanalyzable   SignalQuality   Device	Signal cannot be analyzed		Error Event: Signal Cannot Be Analyzed (for any secondary derived measurement when the input signal is bad)	MDC_EVT_SIG_UNANALYZEABLE	384
ErrorEvent   Unavailable   Processing   Device	Unavailable		Resource is unavailable.	MDC_EVT_UNAVAIL	110
ErrorEvent   Undefined   Processing   Device	Undefined		Undefined	MDC_EVT_UNDEF	112
ErrorEvent   Underflowed   Processing   Device	Underflowed		Underflow was detected in a measurement or calculation.	MDC_EVT_COMPUT_UNDERFLOW	418
ErrorEvent   Unequal   Processing   Device	Unequal		Unequal	MDC_EVT_UNEQU	116
ErrorEvent   Unknown   Processing   Device	Unknown		VMD or signal is unknown.	MDC_EVT_UNK	118
ErrorEvent   Vibration, High   FunctionalDisturbance   Device	Excessive vibration		Vibration hinders adequate measurement.	MDC_EVT_VIB_PROB	188
ErrorEvent   Volume, Measurement, Inoperable   FunctionalDisturbance   Ventilator	Inoperable volume measurement		The volume measurement in a ventilator is inoperable.	MDC_EVT_VENT_VOL_MSMT_INOP	512
ErrorEvent   Volume, Syringe, Empty   Handling   Pump	Syringe empty		Syringe needs to be replaced immediately.	MDC_EVT_ADVIS_PUMP_SYRINGE_REPLACE_IMMED	6714
ErrorEvent   VolumeNotConstant   FunctionalDisturbance   Ventilator	Vol inconst		Breathing volume is not constant.	MDC_EVT_VENT_VOL_BREATHING_IRREG	510

**Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
ErrorEvent   Waveform, Artifact   SignalQuality   Device	Artifact		Artifact is detected in a waveform.	MDC_EVT_WAVE_ARTIF_ERR	432
ErrorEvent   Waveform, Disturbance   SignalQuality   Device	Signal quality		Disturbed waveform: result may be erroneous.	MDC_EVT_WAVE_SIG_QUAL_ERR	434
ErrorEvent   Waveform, GainAdjustmentRequired   FunctionalDisturbance   Device	Gain adjustment required		Signal voltage is out of range.	MDC_EVT_VOLTAGE_OUT_OF_RANGE	460
ErrorEvent   Waveform, Interference   SignalQuality   Device	Signal interference		Interference in measurement	MDC_EVT_MSMT_INTERF_ERR	436
ErrorEvent   Waveform, Invalid   SignalQuality   Device	Invalid signal		Shape/amplitude of waveform is abnormal.	MDC_EVT_WAVE_SHAPE_ABNORM	438
ErrorEvent   Waveform, LowSignal   Processing   Device	Underrange error		Signal amplitude is too low for processing, e.g., waveform detection.	MDC_EVT_RANGE_UNDER	168
ErrorEvent   Waveform, Noisy   SignalQuality   Device	Noisy signal		Noisy signal: result may be erroneous.	MDC_EVT_SIG_NOISY	440
ErrorEvent   Waveform, NoOscillation   SignalQuality   Device	No oscillation		Oscillation in waveform is expected, but not found.	MDC_EVT_WAVE_OSCIL_ABSENT	442
ErrorEvent   Waveform, NoSignal   SignalQuality   Device	No signal		Typically, a zero voltage signal	MDC_EVT_SIG_ABSENT	444
ErrorEvent   Waveform, Overrange   Processing   Device	Overrange error		Signal amplitude is too high for processing.	MDC_EVT_RANGE_OVER	166
ErrorEvent   Waveform, Range   SignalQuality   Device	Range error		Signal is out of range.	MDC_EVT_SIG_OUT_OF_RANGE	446
ErrorEvent   Waveform, SignalProcessing   SignalQuality   Device	Signal processing error		Unspecified signal processing error	MDC_EVT_SIG_PROC_ERR	448
ErrorEvent   Waveform, Weak   SignalQuality   Device	Weak signal		Signal gain low: probably erroneous data extraction	MDC_EVT_SIG_GAIN_LO	404
ErrorEvent   Weak   SignalQuality   Device	Weak		Weak signal was detected.	MDC_EVT_WEAK	128

**Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
LimitEvent   AssistedSpontBreathing   Ventilator	ASB > x s		Assisted spontaneous breathing is longer than a predefined time span (PSW).		3278
LimitEvent   DeliveryTime   Handling   Pump	Delivery time elapsed		Configured time to deliver whole syringe/bottle is over.	MDC_EVT_PUMP_SYRINGE_DELIV_TIMEOUT	574
LimitEvent   High   Processing   Device	High limit alert	HIGH	A metric exceeds a given threshold.	MDC_EVT_LIMIT_AL_HI	450
LimitEvent   High, val>lim   Processing   Device	Value greater high limit		A metric exceeds a given threshold.	MDC_EVT_HI_VAL_GT_LIM	44
LimitEvent   Low , val<lim   Processing   Device	Value smaller low limit		A metric falls short of a given threshold.	MDC_EVT_LO_VAL_LT_LIM	66
LimitEvent   Low   Processing   Device	Low limit alert	LOW	A metric falls short of a given threshold.	MDC_EVT_LIMIT_AL_LO	554
LimitEvent   O <sub>2</sub> , Concentration, Low   FunctionalDisturbance   Ventilator	Low O <sub>2</sub> concentration		Too low oxygen delivery (concentration)	MDC_EVT_VENT_CONC_O2_DELIV_LO	596
LimitEvent   O <sub>2</sub> , Flow, Low   FunctionalDisturbance   Ventilator	Low O <sub>2</sub> flow		Too low oxygen delivery (flow)	MDC_EVT_VENT_FLOW_O2_DELIV_LO	594
LimitEvent   Pressure, Impediment   FunctionalDisturbance   Pump	Flow impedance		Flow is hindered.	MDC_EVT_FLOW_OBSTRUC	576
LimitEvent   Pressure, Line   FunctionalDisturbance   Pump	Pressure alarm		Too much pressure in line	MDC_EVT_PRESS_FLUID_LINE_EXCESS	558
LimitEvent   StandbyTimeElapsed   Handling   Pump	Standby time elapsed		Timeout: device should be either operated or turned off.	MDC_EVT_TIMEOUT	584
LimitEvent   TotalVolume   Handling   Pump	Total volume infused		Total volume infused (pump)	MDC_EVT_PUMP_VOL_TBI_COMP	586
LimitEvent   Volume, Syringe, Low   Handling   Pump	End of volume to deliver		Syringe needs to be replaced soon.	MDC_EVT_ADVIS_PUMP_SYRINGE_REPLACE_IMMED	6714
Status   FunctionalStatus   Device	Functional status			MDC_EVT_STAT_DEV	6278
Status   Active   FunctionalStatus   Device	Active		Active state of, e.g., device	MDC_EVT_STAT_ACTIVE	6198

**Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Status   Agent, Vaporiris, Disabled   FunctionalStatus   Ventilator	Agent vaporiris disabled	A-VAP OFF	The function of gaseous agent mixing iris in a ventilator (anesthesia machine) is disabled.	MDC_EVT_STAT_VENT_GAS_MIXER_FUNC_DISABL	6196
Status   Alarm   FunctionalStatus   Device	Alarm	ALARM	Alarm state of, e.g., device or signal	MDC_EVT_STAT_AL	6216
Status   Alarm, Off   FunctionalStatus   Device	Alarm off	ALARM OFF	Indication: Alarm Intentionally Off (disabled)	MDC_EVT_STAT_AL_OFF	6144
Status   Alarm, Silenced   FunctionalStatus   Device	Alarm silenced		Alarm is silenced (speaker off).	MDC_EVT_STAT_AL_SILENCE	6214
Status   Apnea, Alarm, Disabled   FunctionalStatus   Device	Apnea alarm disabled	APNEA ALARM OFF	Apnea alarm is disabled.	MDC_EVT_STAT_APNEA_AL_DISABL	6274
Status   Battery, Charging   FunctionalStatus   Device	Battery charging		Battery is now being recharged.	MDC_EVT_STAT_BATT_CHARGING	6150
Status   BatteryOperated   FunctionalStatus   Device	Battery operated		Device is battery operated.	MDC_EVT_STAT_DEV_BATT_OPERATED	6276
Status   Beep, Off   FunctionalStatus   Device	Beep off		The beep is off (QRS).	MDC_EVT_STAT_QRS_BEEP_OFF	6272
Status   Calibration, Running   FunctionalStatus   Device	Calibration in progress		Indication: Calibration in Progress, No Measurement Possible	MDC_EVT_STAT_CALIB_RUNNING	6154
Status   Charging   FunctionalStatus   Device	Charging		Charging state of, e.g., battery	MDC_EVT_STAT_CHARGING	6212
Status   CO <sub>2</sub> , Alarm, Disabled   FunctionalStatus   Device	CO <sub>2</sub> alarm disabled	CO <sub>2</sub> ALARM OFF	Carbon dioxide alarm is disabled.	MDC_EVT_STAT_CO2_AL_DISABL	6270
Status   CO <sub>2</sub> , NotCalibrated   FunctionalStatus   Device	CO <sub>2</sub> not calibrated		Carbon dioxide is not calibrated.	MDC_EVT_STAT_CO2_UNCALIB	6292
Status   CO <sub>2</sub> , WarmUp   FunctionalStatus   Device	CO <sub>2</sub> warm-up	CO <sub>2</sub> WARM UP	Carbon dioxide monitor in warm-up mode	MDC_EVT_STAT_CO2_WARMING	6268

**Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Status   ComputerControlled   FunctionalStatus   Device	Computer controlled		Device, e.g., pump, is in computer-controlled mode.	MDC_EVT_STAT_DEV_MODE_COMPUT_CTRLD	6286
Status   Connected   FunctionalStatus   Device	Connected		Connected state of device, sensor, etc.	MDC_EVT_STAT_CONN	6252
Status   Depleted   FunctionalStatus   Device	Depleted		A sensor, absorber, etc., is depleted.	MDC_EVT_STAT_DEPLET	6248
Status   Detected   Processing   Device	Detected		Some signal or special condition was detected.	MDC_EVT_DETETC	20
Status   Disconnected   FunctionalStatus   Device	Disconnected		Disconnection of a sensor, device, etc.	MDC_EVT_STAT_DISCONNECT	6256
Status   Display, Stopped   FunctionalStatus   Device	Display stopped		The display is stopped.	MDC_EVT_STAT_DISP_STOP	102
Status   Door, Closed   Room   Environment	Door closed		Door in the (sleep measurement) room is closed.	MDC_EVT_STAT_DOOR_CLOS	6244
Status   Door, Open   Room   Environment	Door opened		Door in the (sleep measurement) room is opened.	MDC_EVT_STAT_DOOR_OPEN	6220
Status   ECG, Alarm, Disabled   Processing   Device	ECG alarm disabled		Status: All ECG alarms are off (still need these in France to meet French homologation, despite MDD).	MDC_EVT_STAT_ECG_AL_ALL_OFF	6182
Status   ECG, Alarm, PartiallyDisabled   Processing   Device	ECG alarm partially disabled		Status: Some ECG alarms are off (still need these in France to meet French homologation, despite MDD).	MDC_EVT_STAT_ECG_AL_SOME_OFF	6184
Status   Lights, Off   Room   Environment	Lights off	loff	Lights in the (sleep measurement) room are switched off.	MDC_EVT_LIGHTS_IN_ROOM_OFF	276
Status   Lights, On   Room   Environment	Lights on	lon	Lights in the (sleep measurement) room are switched on.	MDC_EVT_STAT_LIGHTS_IN_ROOM_ON	6260
Status   MainsOperated   FunctionalStatus   Device	Mains operated		Device is mains-operated.	MDC_EVT_STAT_DEV_MAINS_OPERATED	6284
Status   Mode, Adult   FunctionalStatus   Device	Adult mode		Device is in adult mode.	MDC_EVT_STAT_DEV_MODE_ADULT	6282
Status   Mode, Paediatric   FunctionalStatus   Device	Paediatric mode		Device is in pediatric mode.	MDC_EVT_STAT_DEV_MODE_PEDIATRIC	6280

**Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Status   NIBP, Cuff, Deflating   FunctionalStatus   Device	Cuff deflating		Noninvasive blood pressure device is deflating cuff and measuring blood pressure.	MDC_EVT_STAT_NBP_DEFLE_ AND_MEAS_BP	6250
Status   NIBP, Cuff, Inflating   FunctionalStatus   Device	Cuff inflating		Noninvasive blood pressure device is inflating cuff to maximum cuff pressure.	MDC_EVT_STAT_NBP_INFL_TO _MAX_CUFF_PRESS	6222
Status   NotCalibrated   FunctionalStatus   Device	VMD not calibrated		VMD is not calibrated.	MDC_EVT_STAT_UNCALIB	6190
Status   Off   FunctionalStatus   Device	Off	OFF	Device or VMD is in off condition.	MDC_EVT_STAT_OFF	6226
Status   Running   FunctionalStatus   Device	Active/running		Indication: Device Active/Pump Running	MDC_EVT_STAT_RUNNING	6294
Status   SighMode, Active   FunctionalStatus   Ventilator	Sigh mode active		Sigh mode is active.	MDC_EVT_STAT_MODE_SIGH_ ACTIVE	6188
Status   Sound, Off   Room   Environment	Sound off	SoFF	Sound in the (sleep measurement) room is switched off.	MDC_EVT_STAT_SOUND_IN_ ROOM_OFF	6258
Status   Sound, On   Room   Environment	Sound on	SOn	Sound in the (sleep measurement) room is switched on.	MDC_EVT_STAT_SOUND_IN_ ROOM_ON	6264
Status   Standby   FunctionalStatus   Device	Standby on	STANDBY	Indication: Device In Standby Mode	MDC_EVT_STAT_STANDBY	6228
Status   TachyApnea, Alarm, Disabled   FunctionalStatus   Device	Tachyapnea alarm disabled		Tachyapnea alarm is disabled.	MDC_EVT_STAT_AL_ TACHAPNEA_DisABL	6230
Status   TachyApnea, Alarm, Disabled   FunctionalStatus   Ventilator	Tachyapnea alarm disabled		Tachyapnea alarm in a ventilator is disabled.	MDC_EVT_STAT_VENT_AL_ TACHAPNEA_DisABL	6210
Status   TestMode   FunctionalStatus   Device	In test mode		Device or VMD is in test mode.	MDC_EVT_STAT_MODE_TEST	6232
Status   Volume, PressureLimited   FunctionalStatus   Ventilator	Respiratory volume pressure limited	PRESSU RE LTD	Respiratory volume pressure is limited.	MDC_EVT_STAT_VENT_PRESS _RESP_VOL_LIMITED	6206
Status   Volume, TimeLimited   FunctionalStatus   Ventilator	Respiratory volume time limited	TIME LTD	Respiratory volume time is limited.	MDC_EVT_STAT_VENT_TIME_ RESP_VOL_LIMITED	6202

**Table A.9.3.1—Nomenclature and codes for device-related and environment-related events (continued)**

Systematic name	Common term	Acronym	Description/Definition	Reference ID	Code
Status   Waveform, Learning   FunctionalStatus   Device	Waveform learning		Device or VMD learns waveform for recognition.	MDC_EVT_STAT_WAVE_LEARN	6234
SynchronizationEvent   Processing   Device	Sync	SYNC	Synchronization event for synchronization of different processes	MDC_EVT_SYNCH	426
SynchronizationEvent   Inspiration, Started   Processing   Ventilator	Inspiration started		Sync puls: Start of ventilator inspiratory cycle	MDC_EVT_VENT_CYC_INSPI_ START	466
SynchronizationEvent   Tick   Processing   Device	Timer tick	TICK	Timer tick of real-time clock for synchronization of all processes	MDC_EVT_TIMER_SYNCH_TICK	480

## Changes to NEMA Standards Publications PS 3.17

### Digital Imaging and Communications in Medicine (DICOM) Part 17: Explanatory Information

**Remove from PS 3.17 Section C.3 – URL is invalid**

The method used for time synchronization of equipment clocks is implementation or site specific, and therefore outside the scope of this proposal. If required, standard time distribution protocols are available (e.g., NTP, IRIG, GPS).

~~An informative description of time distribution methods can be found at:  
<http://www.bancomm.com/cntpApp.htm>~~

A second method of synchronizing acquisitions is to utilize a common reference channel (temporal fiducial), ...

**Add new Section to Annex xxxx of PS 3.17**

**Maybe as a subsection of PS3.17 C Waveforms ?**

## Annex xxxx Neurophysiology Waveforms

### xxxx.1 Purpose of this Annex

This Annex describes some use cases of the Neurophysiology Waveforms.

#### xxxx. ... Electroencephalography

#### xxxx. ... Polysomnography

Polysomnography is a multi-parametric test to record different physiological parameters during sleep. The resulting data – the polysomnogram (PSG) – contains different measured quantities, the most important ones are:

- brain activity (EEG)
- eye movements (EOG)
- activity of skeletal muscles (EMG)

Often additionally some of the following parameters are recorded:

- electrical activity of the heart (ECG)
- changes in blood oxygen levels (pulse oximetry)
- respiratory parameters like nasal and oral airflow via pressure transducers in front of nostrils and mouth or chest and abdominal expansion during breathing (via belts)
- sound recordings to measure snoring

Data acquisition is done via a multichannel recording unit attaching multiple sensors to different parts of the patient's body and usually takes several hours. Channel arrangement varies from lab to lab, minimum need is 12 channels: at least three channels for the EEG, two for the EOG, one or two to measure airflow, one or two for chin muscle tone, one or more for leg movements (EMG), one or two for heart rate and rhythm, one for oxygen saturation and one each for the belts detecting chest and abdominal wall movement.

In many cases additionally a video is taken to record the persons movements during sleep.

< standardized setups ... which signals in which case .. >

#### **xxxx. .. Electromyography**

EMG = Electromyography

With this electrodiagnostic medicine technique the electrical activity produced by skeletal muscles is detected. An electromyography detects the electric potential generated by muscle cells when these cells are electrically or neurologically activated. The signals can be analysed to detect medical abnormalities, activation level, or recruitment order, or to analyse the biomechanics of human or animal movement.

Two techniques are used. Surface EMG assesses muscle function by recording muscle activity from the surface above the muscle on the skin. Intramuscular EMG uses needle electrodes inserted through the skin into the muscle, often in combination with surface electrodes as reference.

Within Polysomnography only surface EMG is used.

Measured values are in the range of 50uV – 30mV.

#### **xxxx. .. Electrooculography**

EOG = Electrooculography

Absence or presence and kind of eye movement is an important measure for classification of the sleep stage, for example show slow-rolling eye movements in less deep sleep stages and rapid, irregular eye movements indicating the REM phase.

Typically two electrodes are used to measure the eye movement. They are placed above or below the outer canthus of each eye.

Measured values are in the same range as the EEG, same sampling rate is used.

#### **xxxx. .. Mapping of miscellaneous of recorded signal data to DICOM waveform objects**

DICOM strictly separates different data. Dependent from their meaning and their (physical) properties they shall be kept as different instances, although keeping their temporal relationship.

Therefore different objects shall be used to store the different measured data.

Already existing DICOM Waveform Storage SOP classes, which cover relevant Neurophysiology measures, are:

- **General ECG Waveform Storage** 1.2.840.10008.5.1.4.1.1.9.1.2  
The General Electrocardiogram (ECG) SOP class is used to store digitized electrical signals from the patient cardiac conduction system collected on the body surface, which has been acquired by an ECG modality or by an ECG acquisition function within an imaging modality or a recording device<sup>1</sup>.
- **Basic Voice Audio Waveform Storage** 1.2.840.10008.5.1.4.1.1.9.4.1  
The Basic Voice Audio SOP class is used to store digitized sound that has been acquired or

---

<sup>1</sup> The DICOM standard uses the wording „acquisition function within an *imaging modality*”. This should be changed as suggested.

created by an audio modality or by an audio acquisition function within an imaging modality or a recording device<sup>1</sup>. A typical use is report dictation.

In the context of Polysomnography this object could be used for snoring detection.

- **Arterial Pulse Waveform Storage** 1.2.840.10008.5.1.4.1.1.9.5.1  
 The Arterial Pulse Waveform SOP class is used to store digitized electrical signals from the patient arterial system collected through pulse oximetry or other means by a Pulse modality or by a Pulse acquisition function within an imaging modality or a recording device<sup>1</sup>.  
 In the context of polysomnography this object could be used to record the oxygen saturation in blood.
- **Respiratory Waveform Storage** 1.2.840.10008.5.1.4.1.1.9.6.1  
 The Respiratory Waveform SOP class is used to store digitized electrical signals from the patient respiratory system, which has been acquired by a Respiratory modality or by a Respiratory acquisition function within an imaging modality or a recording device<sup>1</sup>.  
 In the context of polysomnography this object could be used to record the patient's respiration.
- **Video Photographic Image Storage** 1.2.840.10008.5.1.4.1.1.77.1.4.1  
<TODO: add description and list of possible transfer syntaxes = video codecs>

Together with the SOP Classes defined in this supplement

- Routine Scalp Electroencephalography Waveform Storage
- Electromyography Waveform Storage
- Electrooculography Waveform Storage

a broad variety of signals acquired in Polysomnography is covered.

Missing: How to deal with arbitrary channels ("generic waveform")

The following gives some examples of channel labels (proprietary, EDF, ... ) and proposes a mapping to DICOM SOP Classes

Channel label	Prop. data format	supposed meaning	Mapping to SOP Class
ECG	Prop.	ECG	General ECG Waveform Storage
RSH	Prop.	derived via an electrode on the right shoulder	EEG / arbitrary position
RES	EDF	Respiration	Respiratory Waveform Storage
AIRFLOW	EDF	Respiration	Respiratory Waveform Storage
LIGHT	EDF	information about light on/off	??? could possibly be part of Acquisition Context or stored as an Annotation sep. Channel in case of photic stimulation ??
PR	EDF	??	
STAT	EDF	??	
ROC	EDF	??	
PLETH	EDF	??	

TORACE	EDF	??	
HR	EDF	?? / maybe heart rate	?? / Arterial Pulse Waveforms Storage
MIC	EDF	Snoring	Basic Voice Audio Waveform Storage
NAF	Prop.	nasal air flow	Respiratory Waveform Storage
THO	Prop.	movement of the thorax due to breathing	Respiratory Waveform Storage ?
ABD	Prop.	movement of the abdomen due to breathing	Respiratory Waveform Storage ?
BODY	Prop.	body position	
POSITION	EDF	body position	
		body temperature	

#### xxxx... Example DICOM Routine Scalp EEG Waveform Object

Setup: 24 leads: 1 ECG, 23 EEG

The following is a non-comprehensive sample representation of a 23-lead Routine EEG object.

Nesting	Attribute	Tag	VR	VL (hex)	Value
	SOP Class UID	(0008,0016)	UI	0020	1.3.6.1.4.1.23154.1.2.1.1.9.7.1
	SOP Instance UID	(0008,0018)	UI	0036	1.3.6.1.4.1.23154.1.4.2881783832.12156.1533548323.951
	Study Date	(0008,0020)	DA	0008	20180805
	Content Date	(0008,0023)	DA	0008	20180806
	Acquisition Date Time	(0008,002a)	DT	0016	20000101000000.000000
	Study Time	(0008,0030)	TM	000e	114000.000000
	Content Time	(0008,0033)	TM	0006	113843
	Accession Number	(0008,0050)	SH	0008	76123455
	Modality	(0008,0060)	CS	0004	EEG
	Manufacturer	(0008,0070)	LO	0014	someManufacturerName
	Referring Physician's Name	(0008,0090)	PN	0000	
	Patient's Name	(0010,0010)	PN	000c	PATIENT1^edf
	Patient ID	(0010,0020)	LO	000a	ssspid0815
	Patient's Birth Date	(0010,0030)	DA	0008	19670329

Nesting	Attribute	Tag	VR	VL (hex)	Value
	Patient's Sex	(0010,0040)	CS	0002	F
	Synchronization Trigger	(0018,106a)	CS	000a	NO TRIGGER
	Acquisition Time Synchronized	(0018,1800)	CS	0002	Y
	Study Instance UID	(0020,000d)	UI	0036	1.3.6.1.4.1.23154.1.2.2881783832.12156.1533548324.952
	Series Instance UID	(0020,000e)	UI	0036	1.3.6.1.4.1.23154.1.3.2881783832.12156.1533548324.953
	Study ID	(0020,0010)	SH	0004	4711
	Series Number	(0020,0011)	IS	0002	1
	Instance Number	(0020,0013)	IS	0002	1
	Synchronization Frame of Reference UID	(0020,0200)	UI	0036	1.3.6.1.4.1.23154.1.5.2881783832.12156.1533548324.954
	Acquisition Context Sequence	(0040,0555)	SQ	ffffffff	
%endseq					
	Waveform Sequence	(5400,0100)	SQ	ffffffff	
%item					
	Waveform Originality	(003a,0004)	CS	0008	DERIVED
	Number of Waveform Channels	(003a,0005)	US	0002	0x0017
	Number of Waveform Samples	(003a,0010)	UL	0004	0x001c1700
	Sampling Frequency	(003a,001a)	DS	0004	256
	Multiplex Group Label	(003a,0020)	SH	0004	EEG
	Channel Definition Sequence	(003a,0200)	SQ	ffffffff	
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	1
	Channel Label	(003a,0203)	SH	0002	O1
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1209
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001e	Occipital (theta 90, phi 252)
%enditem					

Nesting	Attribute	Tag	VR	VL (hex)	Value
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	2
	Channel Label	(003a,0203)	SH	0002	P3
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1185
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001e	Parietal (theta 64, phi 230.9)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM

Nesting	Attribute	Tag	VR	VL (hex)	Value
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	3
	Channel Label	(003a,0203)	SH	0002	C3
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1137
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001c	Central (theta 45, phi 180)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0

Nesting	Attribute	Tag	VR	VL (hex)	Value
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	4
	Channel Label	(003a,0203)	SH	0002	F3
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1057
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001e	Frontal (theta 64, phi 129.1)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	5
	Channel Label	(003a,0203)	SH	0004	FP1

Nesting	Attribute	Tag	VR	VL (hex)	Value
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1041
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	0020	Frontpolar (theata 90, phi 108)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	6
	Channel Label	(003a,0203)	SH	0002	P7
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1257
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001c	Temporal (theta 90, phi 216)
%enditem					

Nesting	Attribute	Tag	VR	VL (hex)	Value
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	7
	Channel Label	(003a,0203)	SH	0002	T7
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1249
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001c	Temporal (theta 90, phi 180)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM

Nesting	Attribute	Tag	VR	VL (hex)	Value
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	8
	Channel Label	(003a,0203)	SH	0002	F7
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1073
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001c	Frontal (theta 90, phi 144)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0

Nesting	Attribute	Tag	VR	VL (hex)	Value
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	9
	Channel Label	(003a,0203)	SH	0002	O2
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1214
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001e	Occipital (theta 90, phi 288)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	10
	Channel Label	(003a,0203)	SH	0002	P4

Nesting	Attribute	Tag	VR	VL (hex)	Value
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1190
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001e	Parietal (theta 64, phi 309.1)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	11
	Channel Label	(003a,0203)	SH	0002	C4
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1142
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001a	Central (theta 45, phi 0)
%enditem					

Nesting	Attribute	Tag	VR	VL (hex)	Value
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	12
	Channel Label	(003a,0203)	SH	0002	F4
	Channel Source Sequence	(003a,0208)	SQ	ffffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1062
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001c	Frontal (theta 64, phi 50.9)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM

Nesting	Attribute	Tag	VR	VL (hex)	Value
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	13
	Channel Label	(003a,0203)	SH	0004	FP2
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1042
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001e	Frontpolar (theta 90, phi 72)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0

Nesting	Attribute	Tag	VR	VL (hex)	Value
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	14
	Channel Label	(003a,0203)	SH	0002	P8
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1262
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001c	Temporal (theta 90, phi 324)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	15
	Channel Label	(003a,0203)	SH	0002	T8

Nesting	Attribute	Tag	VR	VL (hex)	Value
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1254
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001a	Temporal (theta 90, phi 0)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	16
	Channel Label	(003a,0203)	SH	0002	F8
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1078
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001a	Frontal (theta 90, phi 36)
%enditem					

Nesting	Attribute	Tag	VR	VL (hex)	Value
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	17
	Channel Label	(003a,0203)	SH	0002	FZ
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1008
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001a	Frontal (theta 45, phi 90
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM

Nesting	Attribute	Tag	VR	VL (hex)	Value
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	18
	Channel Label	(003a,0203)	SH	0002	CZ
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1016
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	0018	Central (theta 0, phi 0)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0

Nesting	Attribute	Tag	VR	VL (hex)	Value
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	19
	Channel Label	(003a,0203)	SH	0002	PZ
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1024
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	001c	Parietal (theta 45, phi 270)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	20
	Channel Label	(003a,0203)	SH	0004	SP2

Nesting	Attribute	Tag	VR	VL (hex)	Value
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1314
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	000a	Sphenoidal
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	21
	Channel Label	(003a,0203)	SH	0004	SP1
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1313
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	000a	Sphenoidal
%enditem					

Nesting	Attribute	Tag	VR	VL (hex)	Value
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	23
	Channel Label	(003a,0203)	SH	0004	FT9
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1121
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	0028	Frontotemporal (theta 108.7, phi 164.3)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM

<b>Nesting</b>	<b>Attribute</b>	<b>Tag</b>	<b>VR</b>	<b>VL (hex)</b>	<b>Value</b>
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%item					
	Waveform Channel Number	(003a,0202)	IS	0002	24
	Channel Label	(003a,0203)	SH	0004	FT10
	Channel Source Sequence	(003a,0208)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0006	7:1126
	Coding Scheme Designator	(0008,0102)	SH	0004	MDC
	Code Meaning	(0008,0104)	LO	0026	Frontotemporal (theta 108.7, phi 15.7)
%enditem					
%endseq					
	Channel Sensitivity	(003a,0210)	DS	0008	0.100008
	Channel Sensitivity Units Sequence	(003a,0211)	SQ	ffffffff	
%item					
	Code Value	(0008,0100)	SH	0002	uV
	Coding Scheme Designator	(0008,0102)	SH	0004	UCUM
	Code Meaning	(0008,0104)	LO	000a	microVolt
%enditem					
%endseq					
	Channel Sensitivity Correction Factor	(003a,0212)	DS	0002	1
	Channel Baseline	(003a,0213)	DS	000a	0.0500038
	Channel Sample Skew	(003a,0215)	DS	0002	0

Nesting	Attribute	Tag	VR	VL (hex)	Value
	Channel Offset	(003a,0218)	DS	0002	0
	Waveform Bits Stored	(003a,021a)	US	0002	0x0010
%enditem					
%endseq					
	Waveform Bits Allocated	(5400,1004)	US	0002	0x0010
	Waveform Sample Interpretation	(5400,1006)	CS	0002	SS
	Waveform Data	(5400,1010)	OX	50c2200	...
%enditem					
%endseq					