# NEMSIS V3.5.0 Defined List – eProcedure.03/dConfiguration.03/dConfiguration.07 - Procedure

## Date

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## Introduction

The Procedures Defined List has been updated to employ a two-tier choice hierarchy in an effort to make identifying and selecting an appropriate value easier for EMS personnel. The first tier represents a generic procedure hierarchy. The second tier represents a more specific procedure within a generic hierarchy.  Additionally, more EMS friendly terms are provided.

| PARENT CODE | EMS DESCRIPTION | SNOMED | SNOMED DESCRIPTION |
|---|---|---|---|
| Administration (Drug, fluid, gas) | Drug administration | 18629005 | Administration of drug or medicament (procedure) |

EMS software implementing this list may provide an interface that first allows EMS personnel to choose a generic procedure category, and then more specific procedure options are provided to make the final value choice.

## Historical Context

The NEMSIS Version 2 Data Standard established a suggested list of Procedure codes. Feedback from stakeholders indicated that the list was not sufficient to clearly describe the patient encounter. NEMSIS Version 3 Data Standard allowed for a much broader range of description. Feedback from stakeholders indicated that the Data Standard now allowed for too broad of a range and the data collected were too detailed for efficient application by EMS clinicians.

The Defined Lists associated with the rollout of NEMSIS v3.5.0 were specifically populated to include codes applicable to greater than 90% of all patient care reports submitted to the National EMS database in 2017 through 2019.

## Methodology

Utilizing data from the NEMSIS National Database, Procedure(s) listed on patience care reports were evaluated for recurrence and repetition. The assessment included 4,830,979 patient care reports within the time frame of 01/01/2017 through 06/19/2019 were evaluated.

The 2019 defined list (associated with NEMSIS V3.5.0) for Procedure represents a minimum of 91.13% of all Procedure codes submitted to NEMSIS during the time frame. The 2019 Defined List for Procedure includes 81 detailed options within 17 categories. (See Hierarchy Example for additional details.)

## Defined List Value Range

The code list associated with eProcedures.03 (Procedure) represents a list of values found in **S**ystematized **No**menclature of **Med**icine -- **C**linical **T**erms (SNOMED CT). The process for gaining access to the SNOMED CT code values is provided below.

The eProcedure.03 Procedure Defined List can be accessed from the NEMSIS TAC website on the Version 3 Resources page: https://www.nemsis.org/v3/resources.html.  The defined code list for eProcedures.03 (Procedure) is represented by SNOMED CT Procedure codes.  The term types utilized for the suggested procedures are the fully specified names

When the procedure defined list was developed, the primary goal within SNOMED CT was to utilize "Therapeutic or Preventive Procedure (e.g., procedure)" or "Health Care Activity (e.g., regime/therapy" codes to identify EMS procedures.

For consistency in reporting, it is important that Software Developers expanding the list of EMS procedures rely on the use of "Therapeutic or Preventive Procedure" or "Health Care Activity" codes.  If it is necessary to utilize other code types, the NEMSIS TAC suggests utilizing the following limited hierarchy to identify a code:

1. Therapeutic or Preventive Procedure
2. Diagnostic Procedure
3. Laboratory Procedure
4. Health Care Activity

If an appropriate code cannot be found in among these code types, the Software Developer or EMS Agency representative should contact the NEMSIS TAC, who will work with SNOMED to add an appropriate code to the SNOMED standard.

## Licensed "Code Lists"

The U.S. National Library of Medicine provides access to the SNOMED CT code values through the Unified Medical Language System (UMLS). An applicant must accept the terms of the UMLS Metathesaurus License and create a UMLS Terminology Services (UTS) account for access to UMLS datasets and terminology browsers. More information can be found at:
http://www.nlm.nih.gov/databases/umls.html.

The NEMSIS TAC may only distribute defined lists with specific value codes from the UMLS system to entities licensed through the UMLS system. Thus, each software developer must seek licensing and provide proof of licensing before gaining access to all of the pre-defined lists available through the NEMSIS TAC.

## Hierarchy Tier Graphic Example

EMS personnel may first choose "Wound Care" within the first tier of Procedures to document a general category of procedure type. Multiple second tier choices may appear including "Apply pressure to wound" and "Tourniquet" to choose from as the specific procedure.

| STEP 1: Select a general classification | STEP 2: Select a more precise description |
|---|---|
| First Tier: Parent Code | Second Tier: EMS Description |
| Wound Care | Apply pressure to wound |
| | Bandage |
| | Tourniquet |

## Reference Material

See the NEMSIS v3.5.0 Data Dictionary for additional technical specifics. https://nemsis.org/technical-resources/version-3/version-3-data-dictionaries/.