NEMSIS V3 Suggested List – dConfiguration.09 - EMS Agency Medications

Date

September 8, 2011 (Initial release)
January 29, 2012 (Updated Medication List Names – FINAL)
March 29, 2013 (Updated one medication: Hydrocortisone, and EMS Use options)
April 17, 2013 (Updated one medication: Hydralazine)
June 6, 2013 (Updated table with explanation)
January 10, 2014 (Added Dextrose 5% Infusion Solution back in the White Paper)
August 22, 2016 (Updated introduction and revised the suggested list on the Resources page: RxNorm codes now listed. Table removed from Whitepaper.)

Authors

Karen E. Jacobson – NEMSIS Director
Keith R. Davis – NEMSIS Data Architect
N. Clay Mann – NEMSIS P.I.
Medical Directors Small Group

Introduction

The Medication suggested list has been updated to include 1) the RxNorm code associated the medication name and 2) the generic medication name with examples of brand names. Examples of medications EMS professionals administer include: Acetaminophen (e.g., Tylenol, Anacin), Albuterol (e.g., Proventil, Ventolin, AccuNeb), and Glucose Oral Gel (e.g., Glutose, Insta-Glucose). The additions were made in an effort to make identifying and selecting an appropriate medication value easier for EMS personnel.

dConfiguration.09 - EMS Agency Medications

The code list associated with dConfiguration.09 (EMS Agency Medications) is represented by a selected group of values found in RxNorm used primarily in the pre-hospital EMS environment. RxNorm is a standardized nomenclature for clinical drugs and drug delivery devices. The process for gaining access to the RxNorm code values is provided at the end of this document.

RxNorm Code Usage Recommendations

RxNorm provides various codes for medications based on the Term Type (TTY). These include but are not limited to: Ingredient (IN), Precise Ingredient (PIN), Brand Name (BN), Sematic Clinical Drug (SCD), Semantic Clinical Drug Form (SCDF), and Semantic Clinical Drug Component (SCDC) codes indicating the medication strength or concentration or mixtures (Synonym of Another TTY = SY), and many term type dosing options.

The NEMSIS TAC recommends that medications administered by EMS professionals in the pre-hospital setting be recorded and submitted in eMedications.03 (Medications.03 - Medication Given) using the Ingredient (IN) code for the large majority of medication names. This is frequently the generic name of the medication. The NEMSIS Version 3 dataset has elements that allow for the separate documentation of the medication route, dosage, and dosage unit using the following three elements:

1. eMedications.04 - Medication Administered Route
2. eMedications.05 - Medication Dosage
3. eMedications.06 - Medication Dosage Units

To review the RxNorm overview, including an introduction, purpose and examples of RxNorm, and its usage please visit http://www.nlm.nih.gov/research/umls/rxnorm/overview.html. To see the explanation of the term types see page ten (10) of this document.

Suggested List for dConfiguration. 09 - EMS Agency Medications

The EMS Term for the suggested medication description from the RxNorm official description and RxNorm (RxCUI) Code is designed for the pre-hospital setting. The medication list was developed based upon collaboration between the NEMSIS TAC and EMS Medical Directors at the agency and state level.

The medication given suggested list is based primarily on the Term Type (TTY) and its corresponding RxNorm description. Minor updates were made for the EMS Term to provide clarify for EMS personnel.

Licensed "Code Lists"

The U.S. National Library of Medicine provides access to the RxNorm 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. RxNorm codes may also be accessed through http://rxnav.nlm.nih.gov/

The NEMSIS TAC may only distribute suggested 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 suggested lists available through the NEMSIS TAC.

Conclusions

By maintaining a single source of these data and making it available internally as well as to our customers, we improve our data quality and consistency. This will reduce reporting errors in data submissions provided it is used as part of our own and our customer's data management best practices.

RxNorm Medication Term Types (TTY)

From the National Library of Medicine website: http://www.nlm.nih.gov/research/umls/rxnorm/overview.html .

TTY	Name	Definition	Example(s)
IN	Ingredient	A compound or moiety that gives the drug its distinctive clinical properties. The preferred name is usually the USAN name.	Fluoxetine, Insulin, Isophane, Human Gentamicin Sulfate (USP)
PIN	Precise Ingredient	A specified form of the ingredient that may or may not be clinically active. Most precise ingredients are salt or isomer forms.	Fluoxetine Hydrochloride
MIN	Multiple Ingredients	Two or more ingredients created from SCDF. In rare cases when IN/PIN or PIN/PIN combinations of the same base ingredient exist, created from SCD.	Fluoxetine / Olanzapine
DF	Dose Form	A complete list of Dose Forms can be found in Appendix 2 of the RxNorm Documentation.	Topical Solution, Oral Tablet
SCDC	Semantic Clinical Drug Component	Ingredient plus strength—see section on Rules and Conventions, below, for units of measurement and for rules pertaining to the calculation of strengths.	Fluoxetine 4 MG/ML
SCDF	Semantic Clinical Drug Form	Ingredient plus dose form.	Fluoxetine Oral Solution
SCD	Semantic Clinical Drug	Ingredient plus strength and dose form.	Fluoxetine 4 MG/ML Oral Solution
BN	Brand Name	A proprietary name for a family of products containing a specific active ingredient.	Prozac
SBDC	Semantic Branded Drug Component	Branded ingredient plus strength.	Fluoxetine 4 MG/ML [Prozac]
SBDF	Semantic Branded Drug Form	Branded ingredient plus dose form.	Fluoxetine Oral Solution [Prozac]
SBD	Semantic Branded Drug	Ingredient, strength, and dose form plus brand name.	Fluoxetine 4 MG/ML Oral Solution [Prozac]
SY	Synonym of another TTY	Given for clarity.	Prozac 4 MG/ML Oral Solution
TMSY	Tall Man Lettering synonym of another TTY	Given to distinguish between commonly confused drugs.	FLUoxetine 10 MG Oral Capsule [PROzac]
BPCK	Brand Name Pack	Branded Drug Delivery Device.	{12 (Ethinyl Estradiol 0.035 MG / Norethindrone 0.5 MG Oral Tablet) / 9 (Ethinyl Estradiol 0.035 MG / Norethindrone 1 MG Oral Tablet) / 7 (Inert Ingredients 1 MG Oral Tablet) } Pack [Leena 28 Day]
GPCK	Generic Pack	Generic Drug Delivery Device.	{11 (varenicline 0.5 MG Oral Tablet) / 42 (varenicline 1 MG Oral Tablet) } Pack