# NEMSIS V3 Suggested List – eHistory.06 - Medication Allergies

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## eHistory.06 - Medication Allergies

For eHistory.06 (Medication Allergies) the use of specific RxNorm codes and a limited defined list of ICD-10-CM codes will be allowed. The NEMSIS TAC recommends the use of RxNorm Codes for the specific medication that a patient may be allergic. The RxNorm Term Type identifying the medication by Ingredient (IN), Primary Ingredient (PIN), or Brand Name (BN) should be utilized. The NEMSIS TAC recommends use of the ICD-10-CM codes for the documentation of allergies into classes of medications (e.g. sulfonamides, narcotic agents, etc).

A combined RxNorm and ICD-10-CM code list created for eHistory.06 (Medication Allergies) is available through the NEMSIS SharePoint repository. The code list includes 22,116 RxNorm codes and 10 ICD-10-CM codes.

Please note that both RxNorm and ICD-10-CM codes are important to address medication allergies. RxNorm codes are available to document allergies when the patient can explicitly state which medications he/she is allergic. ICD-10-CM codes are provided to address instances in which a patient may claim an allergy to a class of drugs (e.g., "I am allergic to sulfa drugs").

## **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), Semantic Clinical Drug Form (SCDF), 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.

To review the RxNorm overview, including an introduction, purpose and examples of RxNorm, and its usage please visit <a href="http://www.nlm.nih.gov/research/umls/rxnorm/overview.html">http://www.nlm.nih.gov/research/umls/rxnorm/overview.html</a>. To see the explanation of the term types see page three (3) of this document.

#### **Licensed "Suggested 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: <a href="http://www.nlm.nih.gov/databases/umls.html">http://www.nlm.nih.gov/databases/umls.html</a>. RxNorm codes may also be accessed through <a href="http://rxnav.nlm.nih.gov/">http://rxnav.nlm.nih.gov/</a>

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.

## Suggested List - ICD-10-CM Defined List

The defined code list of ten (10) for eHistory.06 (Medication Allergies) is represented in ICD-10-CM: Allergy Status to Drugs, Medicaments and Biological Substances (Z88.0 through Z88.9). The specific ICD-10-CM codes are listed on page five (5) based on description and TTY.

## Access to "Suggested List" Archive Files

Access to suggested code lists will be provided on a special section of the NEMSIS TAC's SharePoint site. A licensed user will be able to login to the SharePoint site and download the appropriate archive file (RxNorm, ICD-10, etc).

The UMLS license verification service helps determine if the remote user has a license to use and/or distribute certain code sets. If the user does not have a current license, access to the "suggested lists" archive will be denied.

The "suggested list" files will be zipped archives that are automatically created each time one of the licensed code databases is updated in the NEMSIS master data repository.

## Viewing and Using the "Suggested List" Archive Files

The downloaded suggested list appears in a pipe-delimited text format. The proper code to utilize is the code with the name of the element and closest to the value description. Please note that the CUI, AUI, and TTY fields are included for reference purposes. These codes allow one to locate the exact code and description in the UMLS Metathesaurus that was selected for inclusion in the suggested list.

All lists, including non-UMLS, provide additional fields indicating when a record became active in the NEMSIS TAC's master data repository as well as the version of the source used for a particular code and description in the suggested list.

#### **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: <a href="http://www.nlm.nih.gov/research/umls/rxnorm/overview.html">http://www.nlm.nih.gov/research/umls/rxnorm/overview.html</a> .

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 $\underline{Appendix\ 2}$ 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]
ВРСК	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

## **Unified Medical language System (UMLS) Term Types (TTY)**

This is a partial list of Term Types in Source (TTY) from the National Library of Medicine website. The NEMSIS TAC will be using primarily the designated preferred name (PT) and occasionally the hierarchical term (HT) Term Types in its suggested lists. To view the full list of UMLS abbreviations used in data element

http://www.nlm.nih.gov/research/umls/knowledge\_sources/metathesaurus/release/abbreviations.html

TTY (Term Type in Source)			
DN	Display Name		
DO	Domain		
ET	Entry term		
HC	Hierarchical class		
HD	Hierarchical descriptor		
HT	Hierarchical term		
LT	Lower Level Term		
PT	Designated preferred name		
RT	Designated related term		

## ICD-10 CM Allergy Description for eHistory.06 Medication Allergies

Allergy Description	TTY
Allergy status to penicillin	PT
Allergy status to other antibiotic agents status	PT
Allergy status to sulfonamides status	
Allergy status to other anti-infective agents status	PT
Allergy status to anesthetic agent status	PT

Allergy Description	TTY
Allergy status to narcotic agent status	PT
Allergy status to analgesic agent status	PT
Allergy status to serum and vaccine status	PT
Allergy status to other drugs, medicaments and	
biological substances status	PT
Allergy status to unspecified drugs, medicaments	
and biological substances status	PT