| Intended Users: | Healthcare Organizations | Healthcare Providers | Information Professionals | Researchers |
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# RxNorm and RxNav

**Description**: The RxNorm terminology is a standardized vocabulary for human prescription drugs and certain over the counter medications available in the U.S. Several veterinary drugs are also included. The RxNorm terminology links to several other pharmaceutical vocabularies in the RxNorm dataset and is also part of the Unified Medical Language System (UMLS) Metathesaurus. The unique codes for each brand-name and generic drug prevent ambiguity and encourage interoperability across organizations. RxNorm does not cover medical devices or food items. The full RxNorm dataset is released on the first Monday of each month, with updates released weekly. Pharmaceutical companies submit Structured Product Labeling to the FDA, then the information is added to DailyMed and included in RxNorm.

**Popular uses of this product:**

| Healthcare Organizations | Healthcare Providers | Information Professionals | Researchers |
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| • Encourage interoperability by using standardized pharmaceutical terms.<br>• Exchange standardized medication data electronically across different platforms.<br>• Ensure accurate reporting and billing by using standardized pharmaceutical codes. | • Exchange standardized medication data electronically across different platforms.<br>• Link RxNorm drug terms to pharmacy management or drug interaction software such as First Databank, Micromedex, and Gold Standard Drug Database. | • Assist patrons with using an RxNorm browser called RxNav.<br>• Advise patrons on using RxNorm concept mapping to find synonymous drug names. | • Search for drugs using various identifiers such as MeSH terms, National Drug Codes, FDA codes, etc.<br>• Use an API to explore and download the RxNorm data files.<br>• Identify synonymous drug names through RxNorm concept mapping. |

**Key Points:**

1. RxNorm uniquely identifies a drug's active ingredient, strength, and dose form. This enables sharing standardized drug terminology and data while limiting confusion and ambiguity.
2. People must have a UMLS Terminology Services (UTS) account to access the full RxNorm release files, but people can browse information on RxNav without an account.

**Potential Predicaments:**

1. RxNorm is also available through the UMLS Metathasaurus, which is updated twice a year. RxNorm data files are updated monthly, so the UMLS Metathesaurus may not have the most current information.
2. RxNorm only contains information on drugs that have submitted Structured Product Labeling information to the FDA.
3. RxNav is a browser that allows people to find drugs in RxNorm using various names and codes. RxNav also links drugs in RxNorm to physician-friendly terms, drug classes and drug-drug interaction information.

**Teaching Example:**

1. Type "Citalopram" in the search box. Find the brand name of the drug (CeleXA). At the top of the screen, select the tab "Class View". Find the drug class of citalopram (selective serotonin reuptake inhibitors). At the top, select the tab "Interaction View". Find if citalopram interacts with aspirin (yes, the risk of severity of gastrointestinal bleeding can be increased).

**Real-life Examples:**

1. A pharmacy team at a medical center uses the RxNorm dataset to convert codes so the center's clinical platform, which uses RxNorm codes, can communicate better with the electronic health record (EHR) systems which uses Multum codes.
2. A researcher downloads the most recent RxNorm data release. They use the information to verify and standardize medication and dosage records for a group of patients participating in a cohort study.

**More Information:**

RxNorm Overview RxNav Overview RxNav Tutorial