Common Drug Codes for India
(Terminology Integrated Package)

Release Date: June 20, 2025

Introduction

Drugs (medicinal products) are one of the key data points captured and referred for continuity of care of an individual. In order for the drug information to be identified, stored, referred to, and exchanged between different clinical, reporting, stock, supply chain, and dispensation systems, it is important to have common drug codes across those systems.

Lack of common drug codes across different systems and healthcare setups invariably introduce local maps, formats, and naming conventions leading to input errors, missing information, incorrect identification, and other problems that surface due to a lack of unique identities and diverging naming methodologies. This makes the exchange of health data a difficult and error-prone activity.

For a country rapidly digitizing its information systems and especially adopting digital systems in healthcare information management, it is important that this key piece of information is codified and made available for use across all systems. A different system should be able to use the same codes with slightly different additional information to meet its purposes.

National Resource Centre for EHR Standards (NRCeS), a program of the Ministry of Health and Family Welfare (MoHFW), the Government of India is providing these Common Drug Codes for India (CDCI) for use across healthcare records, supply and pharmacy systems.

Purpose

Common Drug Codes for India (Terminology Integrated Package) is a set of files that integrate with SNOMED CT® global medical terminology files and content for use in any data entry, analysis, or record exchange systems that adhere to MoHFW notified *Electronic Health Record Standards for India 2016* guidelines.

The package provides a list of the concepts, descriptions, and relationships to complement the international content of the SNOMED CT® International Release for use in India. The package, provided as a *National Extension*, builds on substances, combinations, and medicinal products (generics) already present in SNOMED CT® International Release and adds several of these to cover drugs available under various health programs in India.

With Terminology Integrated Package, users of SNOMED CT® International Release can reap the benefits of having a fully integrated, consistent, terminology base that can be used by the application(s) already using SNOMET CT® without having to develop or code a new infrastructure for handling drug codes.

The Extensions are a mechanism to extend SNOMED CT® for specialized terminology needs such as medicine to match the requirements of different clinical specialties/domains. The purpose of this Extension includes:

- Enable standardized coding of medicinal products for clinical care
- Enable linkages to terminology and use in application/system for:
    - Clinical Documentation
    - Data Retrieval
    - Data Analytics
    - Reporting
    - ePrescription
    - Stock management
    - Supply Change management

Scope

This release includes generic medicines, suppliers, and branded medicine concepts, which when used along with SNOMET CT® International Release covers all medicines, except devices, surgical implants, and combi packs, from:

- National List of Essential Medicines (NLEM) 2015 & 2022
- Pradhan Mantri Jan-Aushadhi Yojana
- Affordable Medicines and Reliable Implants for Treatment (AMRIT) programme
- Medicines referred in Telemedicine Practice Guidelines
- HIV Drug list referred by National AIDS Control Organisation
- COVID-19 drug list referred to in CLINICAL MANAGEMENT PROTOCOL: COVID-19 by MoHFW

The concepts have been modeled based on *SNOMED International Medicinal Product Hierarchy - Editorial Guidelines* and *SNOMED CT Drug Model for supporting National Extension v1.0*. The International Drug Model follows ISO IDMP Standards-based modeling (dose form, RoA, UoP, medicinal product, etc.). For details on the Model, refer to ***Annexure.***

Release Summary

This extension includes Generics (*Clinical drug)* and respective Brands (*Real clinical drug*) covered under 03 National programs for direct usage in health applications. The current extension covers both single ingredient and multi-ingredient (up to five active ingredients) Clinical Drugs in terms of composition.

Highlights:

- **59** Clinical drug (CD) and **2975** Real clinical drug (RCD) concepts added

The summary of the content coverage is provided below:

Concept Type	Count
Supplier (Manufacturer)	7567
Product name (Trade or Brand name)	63495
Clinical drug (Generic medicine)	1151
Real clinical drug (Branded medicine)	83478

This Extension along with SNOMED CT International Edition offers a total of **9504** Generic and **83478** Branded Medicines.

This release of extension is synchronous with the *June 2025 SNOMED CT International Edition*.

The CDCI (Terminology Integrated Package) provides the OWL Expression refset file and Concrete Value Relationship file. The Inferred Relationship file continues to follow the RF2 format as earlier. SNOMED CT to OWL conversion and classification has been done through snomed-owl-toolkit available at: https://github.com/IHTSDO/snomed-owl-toolkit

The CDCI package is developed by following a rigorous process of authoring and review of the drug and related concepts. It is determined that the package is suitable for use in clinical systems. However, implementers and users are expected to check its suitability for their own environment. In evidence of any material error, change or correction you are requested to immediately report it at nrc-help@cdac.in.

Get Release Files

Common Drug Codes for India (Terminology Integrated Package) are available to Affiliate Licensees through Member Licensing and Distribution Service (MLDS) and accessed online here:

https://www.nrces.in/services/national-releases#drug_codes

The package is available for use under terms provided in *SNOMED CT Affiliate License*.

Acknowledgement & Contributions

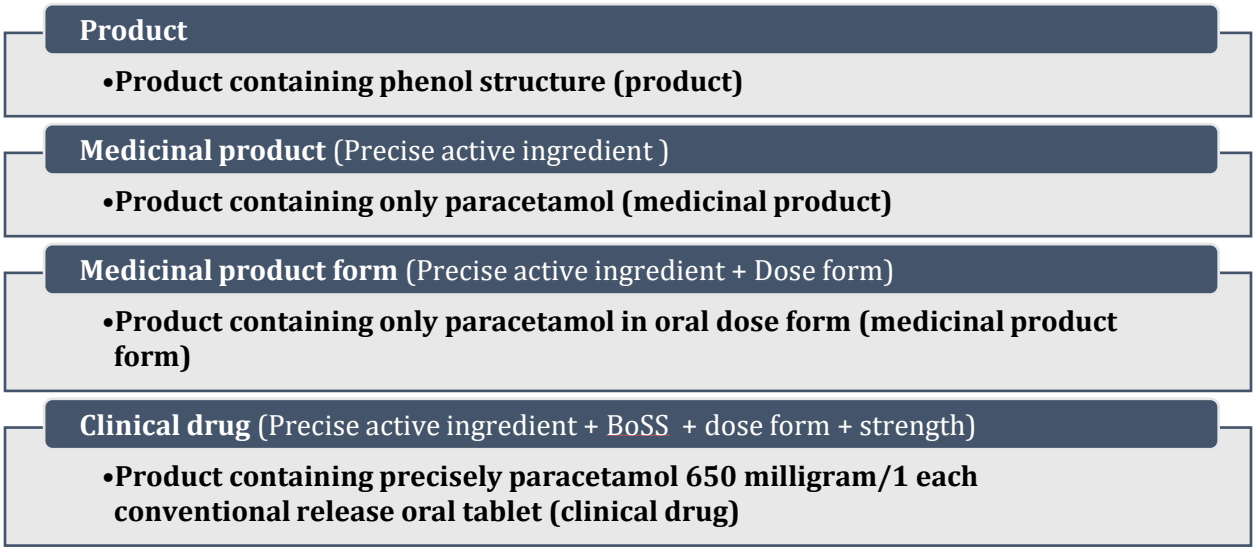
This Extension includes a drug information corpus contributed by the *All India Institute of Medical Sciences (AIIMS),* New Delhi*; 1MG Technologies Private Limited,* Gurgaon, Haryana; *Center for Development of Advanced Computing (C-DAC)*- Noida Centre, RailTel Corporation, and Pfizer Ltd., India.

Computer Facility, AIIMS, New Delhi facilitated the content review and validation for correctness and completeness.

Annexure

Drug Model

The Clinical Drug concepts are modeled based on active ingredients, dose form, package container, and concentration. With each attribute defined, different classes with different semantic tags are placed under 373873005 | Pharmaceutical / biologic product (product) | hierarchy. The figure with an example of modeling various classes is given below:



SNOMED CT International Drug Model Example

This extension includes Generic medicines i.e. *Clinical drugs* that are part of 03 National Programs of India but do not appear in SNOMED CT International Release. The generic medicines having presentation strength provided in the above-mentioned National Programs are also modeled in the current extension. The international release, as per the editorial guide, will include International Non-proprietary Names (INNs) / generics.

The National Drug Extension Model provided by SNOMED International includes the following classes:

Packaged Clinical Drug (PCD) – Represents a *Clinical drug* with the packaging information.

Product Name – Represents the trade or brand name only.

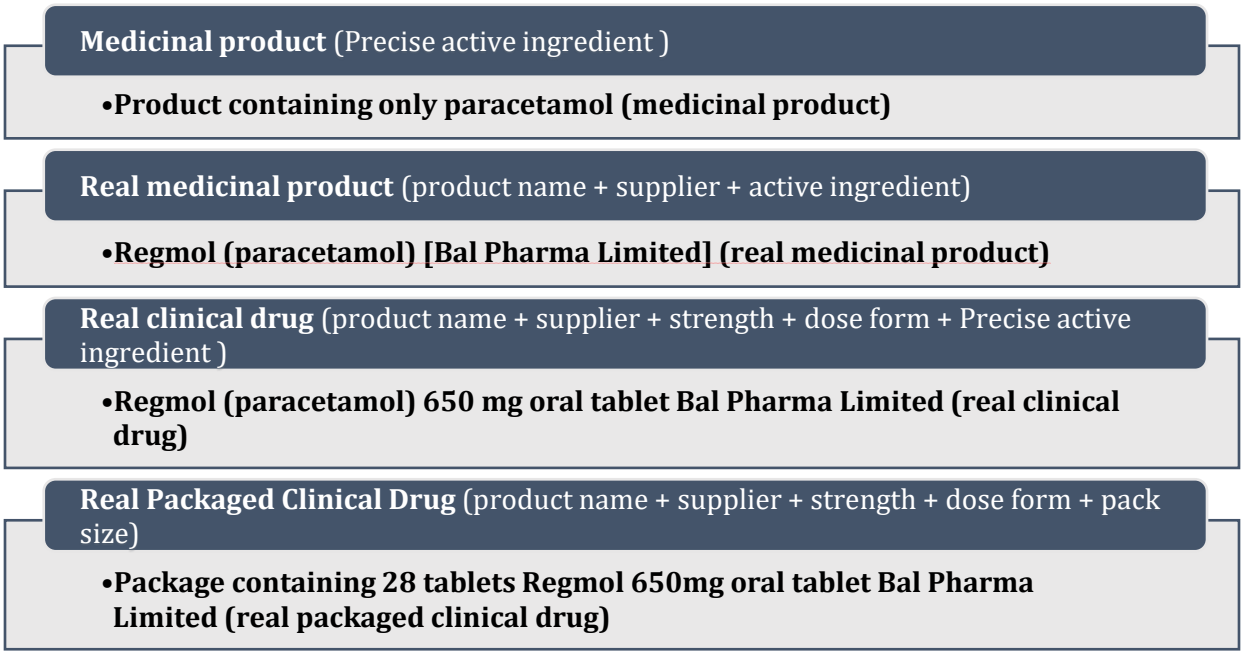
Supplier – Represents the name of supplier or manufacturer only.

Real Medicinal Product (RMP) - Represents a product marketed by a single organization (supplier) under a single name (which may be a trade or brand name) containing the same set of active ingredient substances as a *Medicinal Product*.

Real Clinical Drug (RCD) - Represents a product marketed by a single organization (supplier) under a single name (which may be a trade or brand name) containing the same set of active ingredient substances in the same strength formulated within a single dose form as a *Clinical drug*.

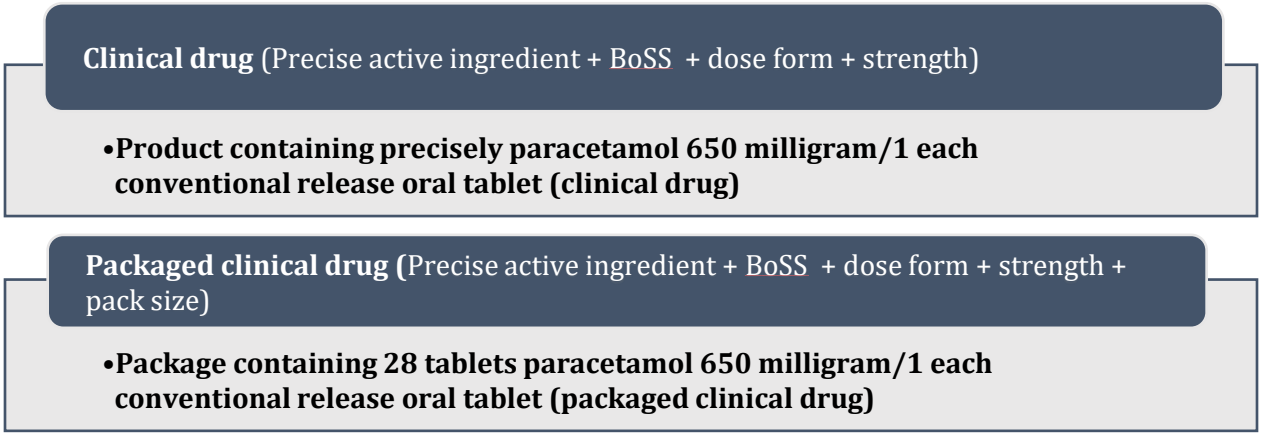
Real Packaged Clinical Drug (RPCD) – Represents *Real Clinical Drug* with its packaging information.

The figure with an example of modeling classes for branded medicines in this extension is shown below:



SNOMED CT Drug Model for National Extension: Example for Branded Medicines

The figure with an example of modeling classes for generic medicines in the National Extension is shown below:



SNOMED CT Drug Model for National Extension: Example for Generic Medicines

The release also includes *Clinical drug* and *Real clinical drug* with presentation strength and concentration strength.

The current release does not include *PCD* and *RPCD* concepts and may be modeled in the future.