

201902 AEMPS experience codifying medicines with SNOMED CT terminology

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Summary

The Spanish Medicines and Medical Devices Regulatory Agency in collaboration with the National Release Center for SNOMED CT from Ministry of Health provides core prescription information to health care information services by codifying authorized medicinal products with SNOMED CT terminology.

Audience

Clinical, Technical

Learning Objectives

1. How to improve medicines interoperability.
2. Standardisation on medicines identification.
3. By the two objectives above enhance clinical care.

Abstract

The Spanish Medicines and Medical Devices Regulatory Agency (AEMPS) in collaboration with the NRC (National Release Center) for SNOMED CT from Ministry of Health (MSCBS) provides core prescription information to health care information services of Spain by codifying authorized medicinal products with concepts from the SNOMED CT terminology.

“Nomenclator” is a medicines database updated daily and published monthly by the AEMPS in XML format, providing standardized information with the objective of improving the e-prescription process and Electronic Health Records content. This enables a consistent management of this information at national level as well as genuine semantic interoperability at electronic level.

Since 2011, concepts, descriptions, relationships and cross-references have been adopted, developed and continuously maintained for 2.111 Virtual Therapeutic Moiety (VTM) concepts, 5.807 Virtual Medicinal Product (VMP)



concepts and 8.543 Virtual Medicinal Product Package (VMPP) concepts at pharmaceutical brand name (presentation) level. These concepts correspond to 29.447 National Numbers included in the Nomenclator database.

Core SNOMED CT concepts are being used where applicable. Currently (April 2019) the Spanish Extension of Medicines for SNOMED CT represents 77.7 % of the active concepts (12.813 of 16.461) used at regulatory level; national extension concepts represent a 100% of the VMPP terms (8.543), 58.14% of the VMP terms (3.376), and a 41,3 % of the VTM terms (872). A total of 16.461 concepts, 25.628 descriptions and 12.813 relationships have been generated.

Spain has 18 autonomous regional healthcare services with different prescribing rules. Codifying medication information is a key element to allow interoperability among the different regions and to deploy data exchange services without relying on the brand name of medicines. On the other hand, we must emphasize the importance of providing structured data models of pharmacological attributes which are relevant to the prescribing systems. Structured and encoded information is essential for decision support as well as indexing of other medicines databases, in order to enhance clinical care and patient safety.