## UNICOM improving semantic interoperability: using ISO IDMP and SNOMED CT to represent medicinal products

Introduction

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#### Abstract

- The UNICOM project aims to implement ISO IDMP standards related to the identification of medicinal products, across both the European and global health ecosystems.
- One of the goals of UNICOM is on the development of data models to ensure the alignment of ISO IDMP with the current attributes used by Member States.
- This goal also supports the semantic interoperability between national systems by mapping and aligning the various coding systems required to describe medicinal products, such as SNOMED CT; which provides a comprehensive set of attributes related to medicinal products identification and is translated into all European languages, thus ensuring semantic interoperability.
- Aligning ISO IDMP and SNOMED CT medicinal products catalogues can also enhance their implementation and facilitate the mapping of medicinal product data, leading to trusted and secure identification of medicines across the EU and promoting, ultimately, the safe use of medicines.



## Introduction

- The UNICOM project intends to facilitate the overall implementation of the ISO IDMP (Identification of Medicinal Products) standards that provide the basis for the global identification of medicinal products.
- The SNOMED CT Medicinal Product hierarchy provides concepts to describe medicinal products at various levels of abstraction with international applicability and support for interoperability in patient care and health data analysis.

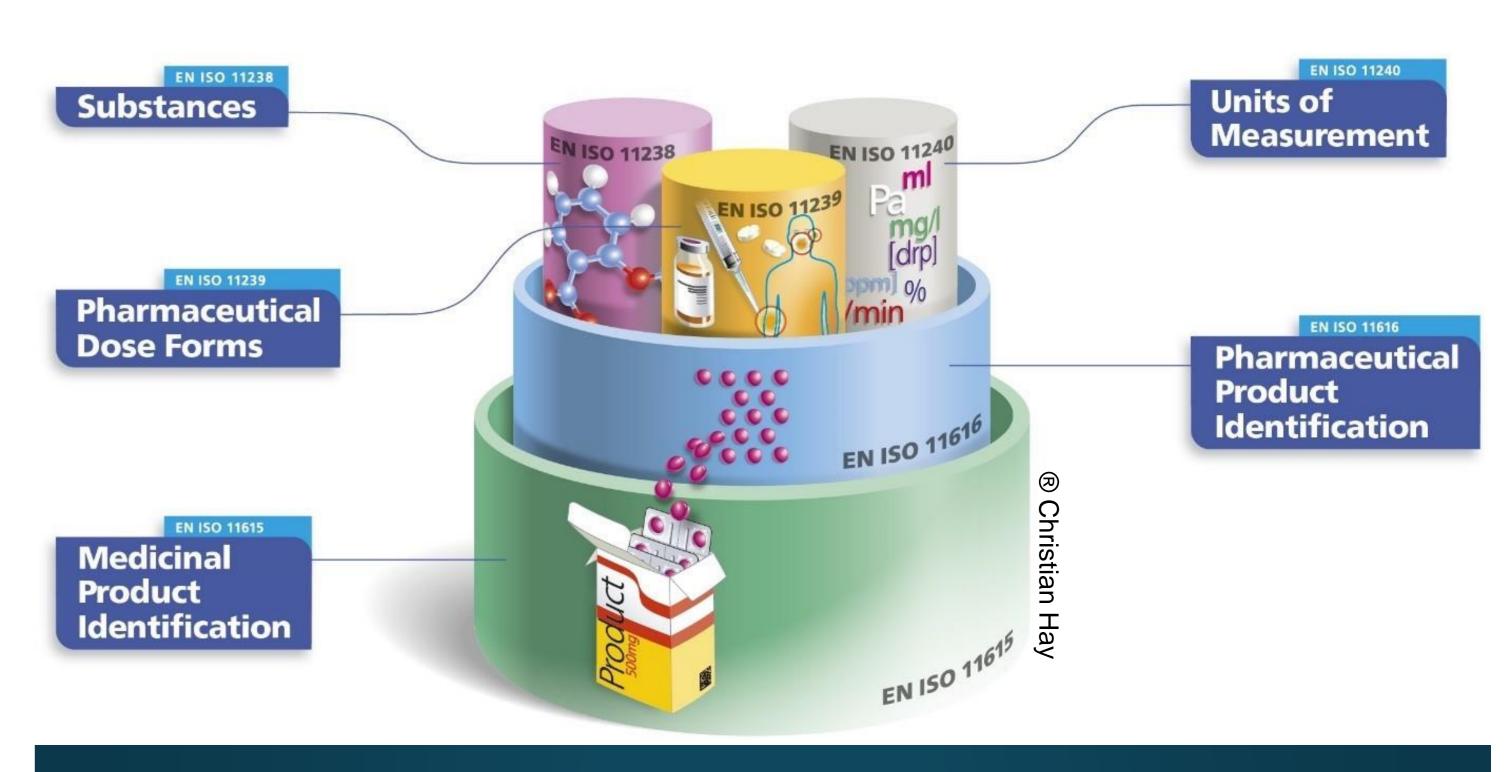


Image Caption – The 5 ISO standards used to identify medicinal products







Introduction

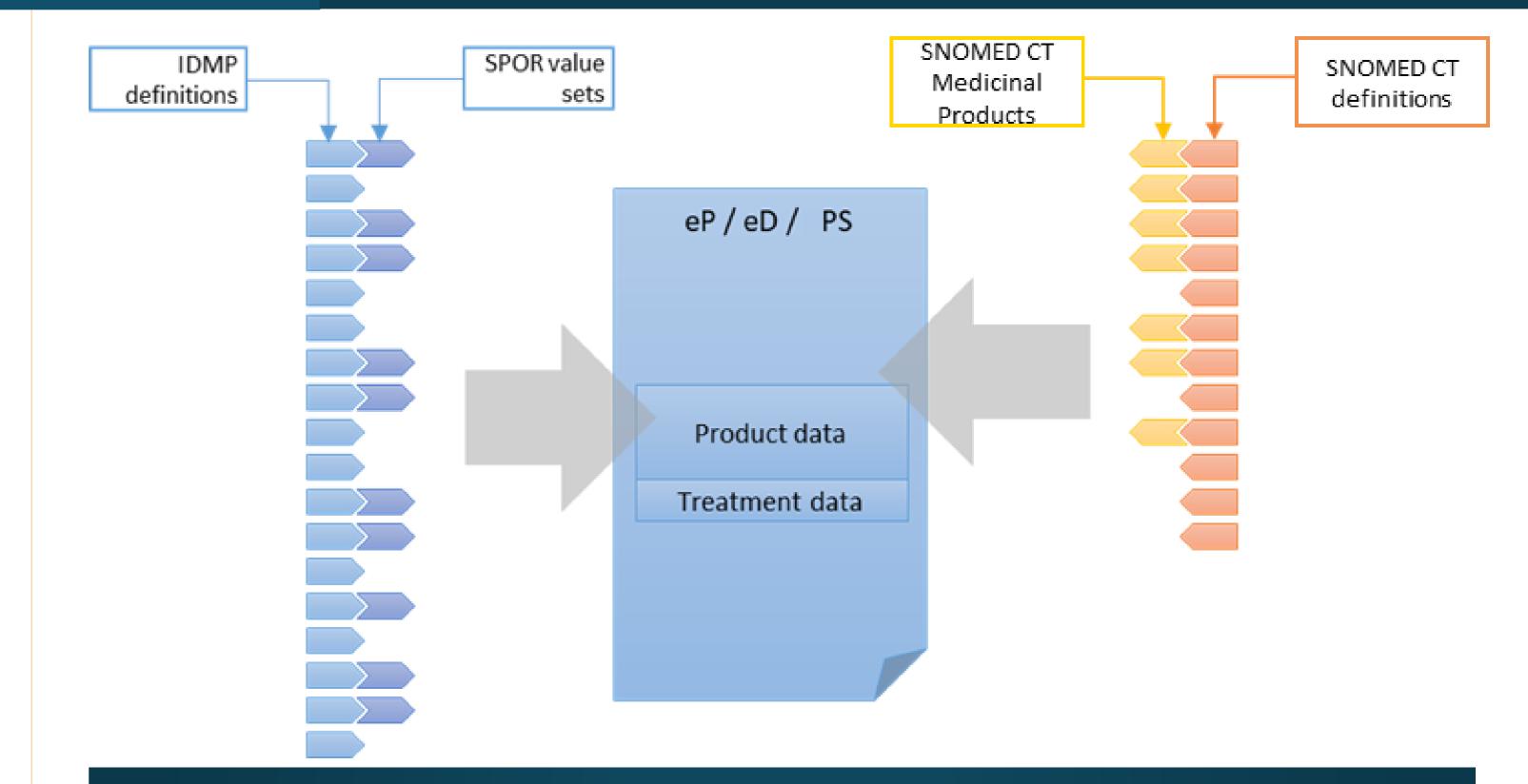
Methods

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# UNICOM & SNOMED CT: towards semantic interoperability

- Implementing IDMP across different eHealth stakeholders will enhance the capacity of all countries to clearly identify medicinal products, as well as improve the safety of dispensations in cross-border scenarios by preventing misidentification of medicinal products.
- One of the tasks of UNICOM is focused on the development of data models to ensure the alignment of ISO IDMP with the current attributes used by Member States for ePrescription and eDispensation of medicinal products.
- This task also supports the semantic interoperability between national systems by mapping and aligning the various coding systems required to describe medicinal products, such as SNOMED CT; which provides a comprehensive set of attributes related to medicinal products identification and is translated into all European languages, thus ensuring semantic interoperability.
- Aligning ISO IDMP and SNOMED CT medicinal products catalogues can also enhance their implementation and facilitate the mapping of medicinal product data, leading to trusted and secure identification of medicines across the EU and promoting, ultimately, the safe use of medicines.



Common data attribute specifications between IDMP and SNOMED CT

### Conclusions

- A direct relationship between SNOMED CT Med. Product. and ISO IDMP is possible.
- The interoperability between ISO IDMP and SNOMED CT allows to exchange medicinal products information without loss of information or meaning
- The use of both systems can support the correct medicinal products identification and improve the patient safety.





