

UNICOM Test Lab: Implementation of ISO's IDMP Standards Across the EU

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Abstract. The UNICOM Test Lab enhances patient safety and healthcare efficiency by implementing ISO's IDMP standards across the EU. Funded by the EU's HORIZON Programme, this initiative unites diverse stakeholders to enable the seamless exchange of medicinal product information. This paper details the interoperability challenges and methodologies employed, highlighting the UNICOM Test Lab's role in validating and testing tools for IDMP standards implementation, aiming for semantic interoperability and a safe pharmaceutical supply chain within the EU.

Keywords. Identification of Medicinal Products, ePrescription, Interoperability, Substitution, Patient Safety

1. Introduction

UNICOM (Up-scaling the global univocal identification of medicines) [1] aims to enhance patient safety and healthcare through the implementation of the ISO IDMP standards.

This European Commission-supported Innovation Action involves partners from national medicines authorities, healthcare organizations, and IT companies working together to achieve semantic interoperability and accurate medication identification across EU member states.

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2. Interoperability and Technical Services

UNICOM Test Lab resources [2,3] offer valuable technical components and documentation that are fundamental in adopting IDMP. The UNICOM IDMP FHIR Database [4] supports cross-border exchanges with a minimal set of attributes required for medicinal product data exchange. A FHIR server, publicly accessible for testing, ensures the necessary infrastructure for data integration. Additionally, the Smart Substitution component ensures uniform medication access across the EU by identifying therapeutically compatible alternatives using an advanced recommendation system. This system addresses practical obstacles in medication substitution by applying local rules and ensuring uninterrupted treatment for patients.

3. Value Added to the Scientific Community

The UNICOM Test Lab offers significant contributions to the scientific community by providing tools and methodologies for implementing IDMP standards. The project emphasizes interoperability, facilitating seamless data exchange across healthcare systems, and enhancing patient safety by improving medication accuracy and accessibility. Additionally, it fosters innovation by developing new approaches for medication substitution and identification.

4. Conclusion

The UNICOM Test Lab plays a vital role in implementing IDMP standards across the EU, ensuring interoperability and enhancing patient safety. Future work will involve collaboration with global standards organizations to further develop and formalize key innovations as conformance-testable interoperability specifications.

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References

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