

Computational approaches of Drug utilization applied to Health Big Data to support health policies for chronicity management

The management of healthcare is undergoing a significant transformation through the utilization of Big Data. Nowadays, applied Real World Data (RWD) research activities in health care are increasingly playing a predominant role for health care governance and planning.

In this context, the PhD project is based on the growing demand and necessity to delve into scientific research in healthcare applied to Big Data, driven by the realization that the vast amount of available data presents unprecedented opportunities to enhance the decision-making process within pharmaceutical governance.

The PhD project aims to explore novel and innovative computational methodologies for analyzing healthcare data, specifically in the pharmaceutical sectors, in order to fully comprehend their roles, potentials, and limitations. By applying computational analytical models to real-world data sources, the project seeks to develop, implement, and validate various tools and innovative models of drug utilization from a comparative perspective among European, national, and regional levels of government.

The utilization of drug-utilization models on healthcare data will support decision-makers in evaluating pharmaceutical care. These tools aim to improve the effectiveness, efficiency, and sustainability of pharmaceutical governance policies by providing in-depth information on the therapeutic value, appropriate use, and cost of drugs.

In summary, the PhD project aims to develop innovative computational approaches for analyzing healthcare data in the pharmaceutical context, with the objective of supporting decision-makers in evaluating pharmaceutical care, comparing different governance models, and providing advanced informative tools for improved pharmaceutical sector governance.

The PhD project will be carried out within the Center of Pharmacoeconomics and Drug Utilization research (CIRFF) at the Department of Pharmacy, in collaboration with public government agencies and national and international research centers in the field of drug utilization, pharmacoeconomics, and regulatory sciences.

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