Prevalence of multimorbidity in IPCI was estimated to be at 29.23%.

Quantifying multimorbidity in IPCI: An analysis of more than 1.8 million people.

Background: Multimorbidity, the presence of multiple chronic conditions in an individual, is a growing global health concern. Multimorbidity is associated with increased healthcare utilization, higher costs, and poorer health outcomes such as mortality and disability. Using the general practitioner database IPCI, and OHDSI’s standardized analytical tools, we perform Association Rule Mining to study multimorbidity prevalence and the most common multimorbid conditions.

Methods

1. We retrospectively extracted information from the Integrated Primary Care Information (IPCI) database, which contains electronic patient records from 350 General Practitioners in the Netherlands.
2. We define our cohort as “All patients in the database, above 18 years old, with an observation period starting any time before 31st December 2022 with at least one year of observation in the database.”
3. We collected information based on a set of 75 conditions, which were identified by expert panels of GPs in Denmark using the ICPC-2 vocabulary. We mapped those concepts to SNOMED resulting in a list of 151 distinct concept IDs and used them to quantify prevalence of multimorbidity. The conditions cover a wide range of categories that encompass various bodily systems and organs, incorporating prevalent chronic diseases such as cancer, hypertension, and dementia, as well as HIV, trauma, and lifestyle factors like tobacco and alcohol abuse.

Limitation: To quantify multimorbidity, this study used the presence of concepts belonging to the definition of multimorbidity, instead of phenotype definitions. Additionally, the same person appearing in the study population more than once is a possibility.