

Annual Report

Each year we develop our annual report to inform the healthcare providers that contribute to the PHARMO Data Network on our work the previous year. The report describes highlights of 2021 like recently initiated collaborations with external partners, such as the “Profiling Parkinson’s disease” ProPark Consortium and “A Personalized Medicine Approach for Alzheimer’s Disease” ABOARD project, and “Vaccine monitoring Collaboration for Europe” VAC4EU. Further, it highlights the important role our Institute served to gain insights into the COVID-19 pandemic, amongst others through the involvement in an early warning system and research on COVID-19-related adverse events. Finally, within our annual report we provide insight an overview of our expertise and statistics of our research and collaborations.

Statistics of performed research

Between 2012 and 2021, PHARMO has written 207 scientific reports, with a yearly average of 21 reports. In 2021 24 reports were written, of which most were on cardiovascular diseases, followed by oncology. Further, between 2012 and 2021, 197 manuscripts have been published in international peer-reviewed journals on studies using data from the PHARMO Data Network, yielding an average of 20 publications per year. These manuscripts were either drafted by researchers of the PHARMO Institute or by academic researchers who had been granted access to data from the PHARMO Data Network for specific projects. The manuscripts from 2021 mainly focused on cardiovascular diseases and oncology. In total, 18 publications appeared in 2021. An overview of statistics on the publications and reports per disease area and type of study is shown in the below figures (Fig. 1-4).

Figure 1. Number of reports for which data from the PHARMO Data Network was used in total and per disease type

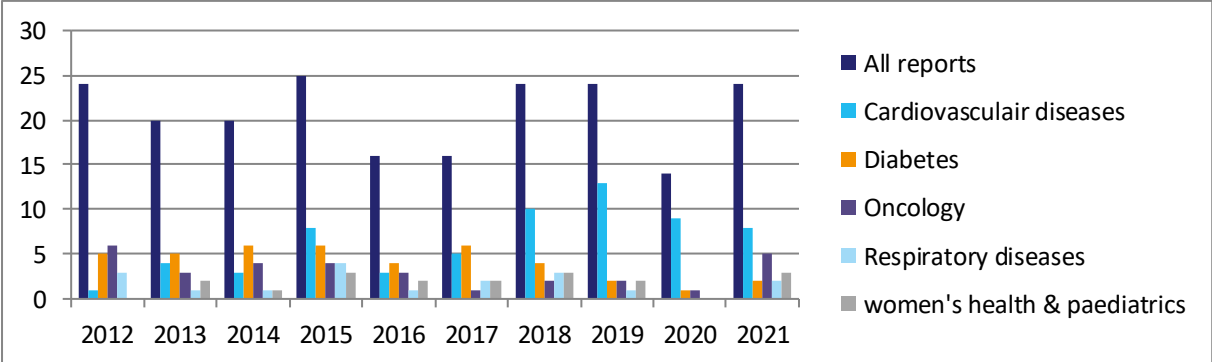


Figure 2. Number of publications for which data from the PHARMO Data Network was used in total and per disease type

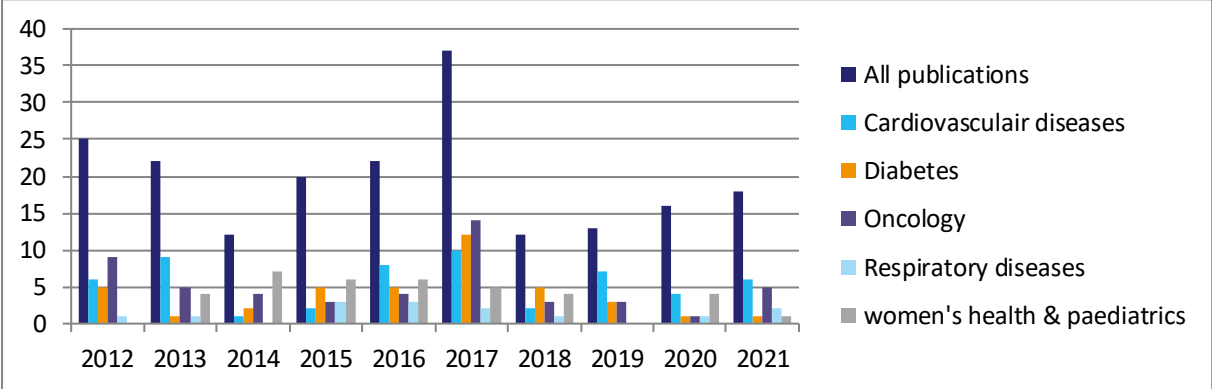


Figure 3. Number of reports per study type

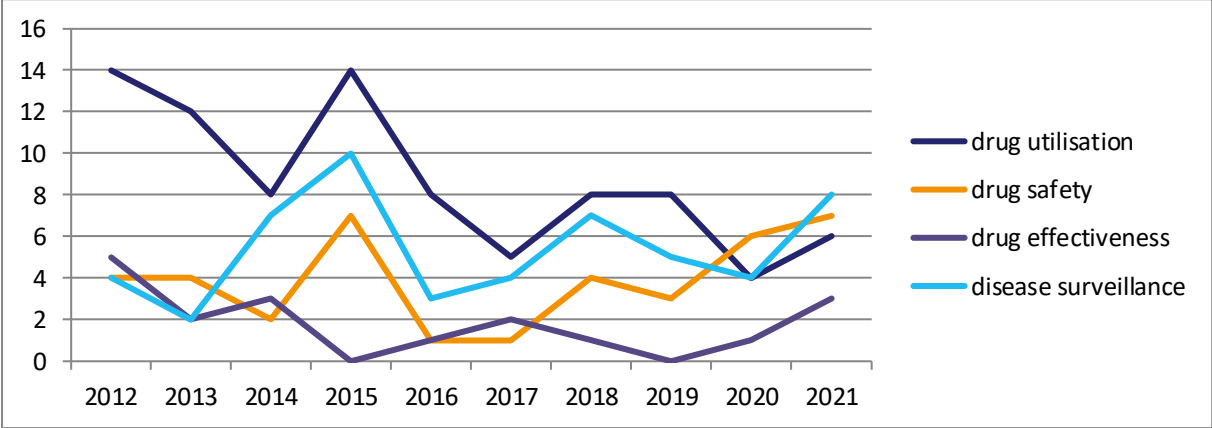
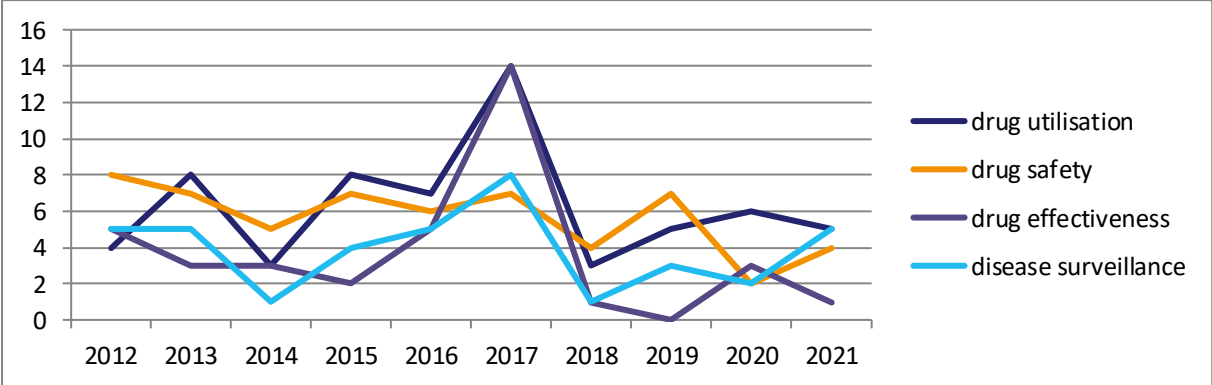


Figure 4. Number of publications per study type



Collaborations

At PHARMO we perform studies ourselves to support the pharmaceutical industry with their research questions, but we also collaborate with academia. In these academic collaborations we support the academic researcher with the design of the study and provide data from the PHARMO Data Network. In 2021 10% of our projects concerned collaborations with academic partners. Other clients (47%) included research institutes and Dutch and European authorities.

A lot of our studies are initiated upon request by the European Medicines Agency (EMA). The EMA requests market authorisation holders to study the effectiveness and safety of pharmaceutical products in a real-world setting or to monitor the impact of risk minimisation measures. For these post-authorisation safety and efficacy studies (PASS/PAES) we collaborate with multiple expertise centres with access to data across Europe. In these multi-country studies, PHARMO can act as a coordinator or as one of the partners. In 2021 we have coordinated 7 European studies and partnered in 21 other studies.

We currently have established relationships with partners in the Nordics, UK, Germany, France, Spain and Italy. We are always looking to expand our network with local expertise centres that have access to data and extensive knowledge of their data and local healthcare system.

To increase transparency, we aim to register our multi-country studies in the EU PAS Register of the European Network of Centres for Pharmacoepidemiology and Pharmacovigilance (ENCePP). An overview of previous and ongoing European projects can be found here:

<http://www.encepp.eu/encepp/studiesDatabase.jsp>