PHARMO
Institute for Drug Outcomes Research

The PHARMO Institute is an independent scientific research organisation dedicated to the study of disease epidemiology, drug utilisation, drug safety, health outcomes, and utilisation of healthcare resources in real life.
Our mission is to provide solutions for decision-makers in market access, health economics and health outcomes through longitudinal tailor-made studies. We maintain a large and high quality patient-centric health database network and are continually innovating our research methods and output products to meet our clients' needs.

We invite you to read our newsletter.

Patient journey - Assessing multiple lines of treatment
Information on the position of a specific drug within the total line of treatment can help decision makers in market access and sales, but also healthcare professionals. The PHARMO Institute has developed a study method to provide this information within a single visual overview: the patient journey. In the basic patient journey the treatment changes of a group of patients with a (chronic) disease can be followed over a period of time.

A unique view on the market and its dynamics - two examples
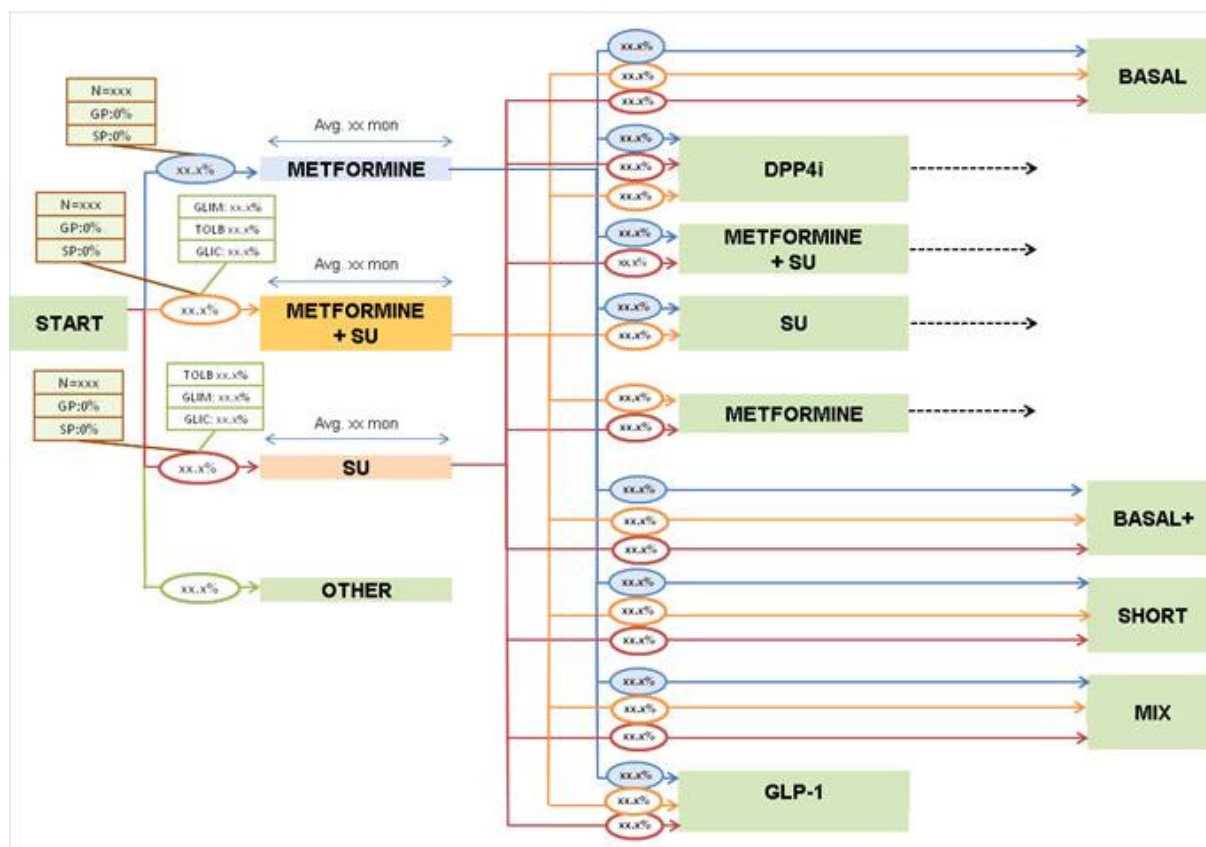Below an example of a patient journey focused on type 2 diabetes patients.

Figure 1. Example of a basic patient journey diabetes type 2: oral anti-diabetics.
SU: sulphonylurea; DPP4I: DPP-4 inhibitor; GLP-1: glucagon-like peptide-1; BASAL, BASAL+, SHORT, MIX: insulin

The example patient journey includes the following elements:
- total number of patients taking a specific treatment step (N= xxx)
- percentage of patients initiated by the general practitioner (GP: xx.x%) or specialist (SP: xx.x%)
- percentage of patients taking a specific treatment step (% in ovals)
- top of products that were initiated at start of the new treatment (for example GLIM: glimepiride; TOLB: tolbutamide; GLIC: gliclazide)
- average duration of treatment in months (Avg xx mon).

Other elements that can be added are:
- number of patients in a specific therapy step
- % initiation by gender or age class
- mean dose or age at initiation
- therapy duration at the previous step before initiation of the next step
- market share
- and more.

Furthermore, the changes within a treatment step regarding dose, products or prescriber can be made visible as well.

Below an example of change in prescriber is shown for the COPD market.

Figure 2. Example of change in prescriber.
FDC: fixed dose combination; GP: general practitioner; SP: specialist

At each treatment step we can assess co-morbidities and other relevant clinical information included in the databases of the PHARMO Database Network, for example hospitalisations, laboratory values (HbA1c, LDL etc.) and GP data (diagnosis etc.).