

Using Routinely Collected Data to Inform Pharmaceutical Policies

Analytical Report
for OECD and EU countries
In a nutshell

Analytical report in a nutshell

With support from the [European Commission](#), the OECD explored countries' routine collection of data on prescribed and dispensed medicines to identify best practices, and to assess the potential impact on health and pharmaceutical policies.

In total 26 OECD and EU member countries responded to a survey addressing the availability and accessibility of routinely collected data on medicines and their applicability to developing evidence. The analytical report explores the utility of evidence from clinical practice, looking at experiences and initiatives across the OECD and EU.

This factsheet presents the findings of the report in a nutshell.

Routinely collected data

Health systems routinely collect vast amounts of patient-level data. These data offer increasing opportunities to distil evidence from clinical practice. They help assessing and monitoring the effectiveness and safety as well as benefits and costs of health care interventions.

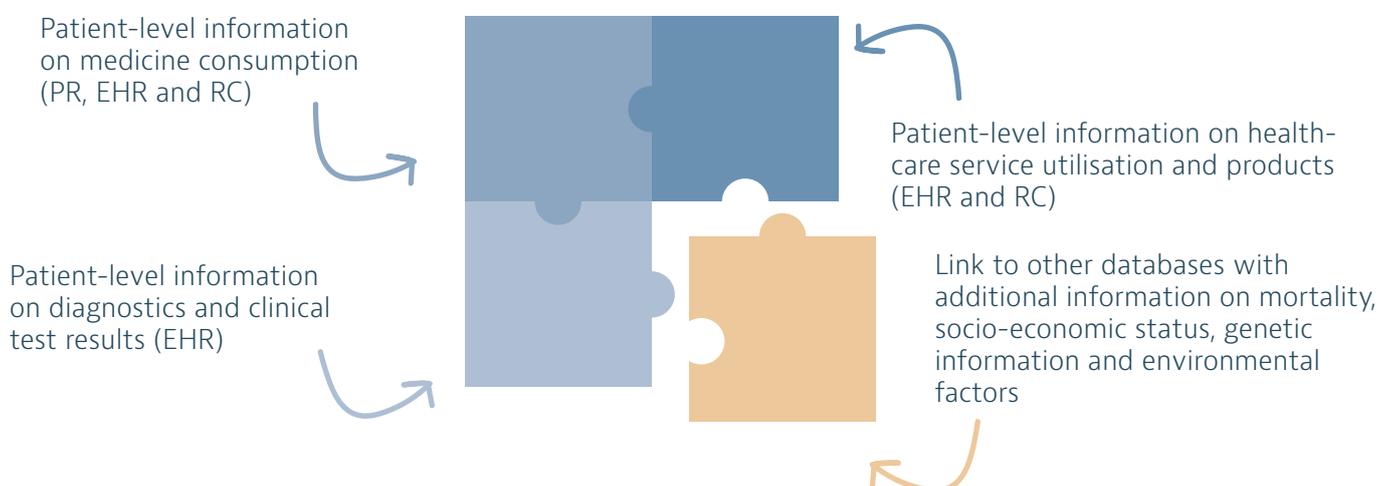
In many OECD and EU countries, the breadth and volume of routinely collected electronic patient-level data are increasing. However, the countries' capacity to generate the evidence from the data and use it to inform health policies varies considerably.

Sources

Routinely collected data on prescribed and dispensed medicines provide information about patients' interactions with the healthcare system. They can be extracted from pharmacy records, personal health records, reimbursement claims and billing information.

The richest data sources go beyond prescribing and dispensing medicines and can provide information on utilisation of health services and outcomes of treatment. These datasets can either capture this information directly or draw it from other health and healthcare datasets to which they are dynamically linked.

Figure 1. Main sources of routinely collected data.



Note: PR: Pharmacy records, EHR: Electronic Health Records, RC: Reimbursement claims and billing information.

Source: *Using Routinely Collected Data to Inform Pharmaceutical Policies. Analytical Report.*

Uses of routinely collected data

Figure 2. Routinely collected data are mostly used for monitoring medicine use and national spending.



Impact on policies and health technology assessments

Evidence generated from routinely collected data and clinical practice are used to inform health technology assessments (HTAs) more often than to guide decisions on marketing authorisation by regulatory agencies. This is partly due to timing issues, since by definition routinely collected data are only available from the time a technology is diffused. In addition, the traditional evidence hierarchy prevents routinely collected data from being central to decision-making.

Generally, regulatory agencies use routinely collected data in post-market safety surveillance and for ad-hoc risk-benefit re-assessment. Institutions in charge of HTA consider evidence derived from routinely collected data to revise their assessments of medicines in most countries. However, the evidence from randomised controlled trials is often considered more important. Observational studies based on routinely collected data have sometimes influenced decisions on coverage conditions or prices, for example in Australia, Estonia, Finland and France.

Recommendations: How to improve the use of routinely collected data?

Methods to generate evidence from routinely collected data, especially for assessing effectiveness and comparative effectiveness, need to be further developed and gain greater legitimacy and recognition from health technology assessment (HTA) agencies.

Countries that lag behind in terms of data infrastructure and governance could - in line with the *Recommendation of the OECD Council on Health Data Governance* and with reference to best practices in OECD countries - benefit from upgrading their capacity of harnessing the data routinely generated within their health systems.

Cross-border knowledge sharing could improve if all studies - relevant, topical, transferable to other contexts and presenting actionable results - were published in peer-reviewed journals and systematically considered by both HTA agencies and decision-makers during the life-cycle of the products in question.