

# USING ROUTINELY COLLECTED DATA TO INFORM PHARMACEUTICAL POLICIES

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# Are countries evenly prepared to exploit the full potential of routinely collected data (RCD)?

## Using Routinely Collected Data to Inform Pharmaceutical Policies

Analytical Report  
for OECD and EU countries



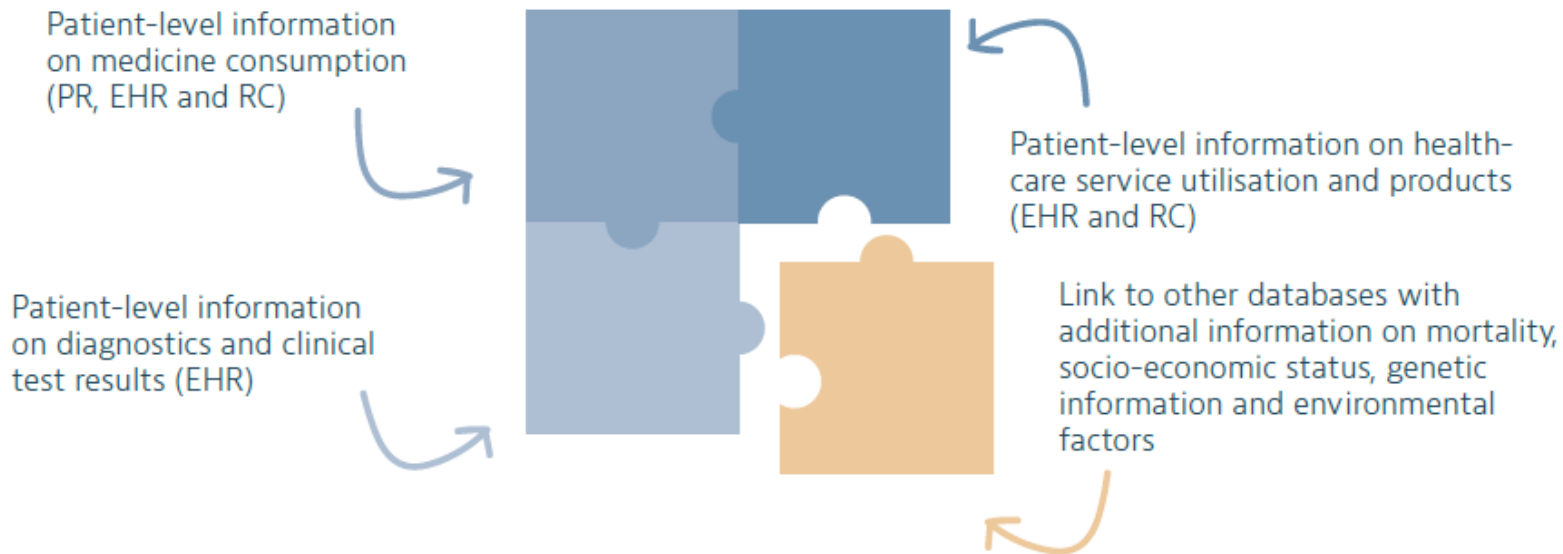
### Using Routinely Collected Data to Inform Pharmaceutical Policies

EU/EEA Country Notes

Country notes	Country notes
<h4>Belgium</h4> <p>Routine level data on prescribed and dispensed medicines are routinely collected in Belgium. These data include information on medicines that are dispensed in hospitals, ambulatory care clinics and long-term care institutions. Also patient level information on physician - prescribed medicines are included, as long as they have been dispensed by a pharmacist.</p> <p><b>Sources</b> Community pharmacy records and insurance claims are the main sources of routinely collected data in Belgium.</p> <p><b>Database characteristics</b> Routine data are collected from all the seven Belgian sickness funds, aggregated and made available in the Agence Nationale Fédérale (ANFI) database, the Agence Nationale pour l'Information et la Recherche Médicales (ANIRIM) and ANIRIM-ES.</p> <p><b>Who can access these data?</b> The Ministry of Health and the National Agency for Health and Consumer Protection (NAG) have access to aggregated data.</p> <p><b>What are routinely collected data used for?</b> Measuring trends in prescribing, quality and safety, evaluating effectiveness and safety.</p> <p><b>How have the data been used to inform pharmaceutical policies and clinical practice?</b> Routinely collected data are not used to inform price setting or reimbursement levels in Belgium.</p>	<h4>Czech Republic</h4> <p>Routine level data on prescribed and dispensed medicines are routinely collected in the Czech Republic. These data include information on medicines reimbursed by the health coverage scheme.</p> <p><b>Sources</b> Insurance claims are the main source of routinely collected data.</p> <p><b>Database characteristics</b> Routine data are collected routinely and made available in the National Register of Ambulatory Health Services (RPA) database at the national level, covering 100% of the level prescriptions.</p> <p><b>Who can access these data?</b> Employees of the data controller (Institute of Health Information and Statistics) have access to aggregated data files on an ad-hoc basis.</p> <p><b>What are routinely collected data used for?</b> Since the NERIS database has only been operational since January 2018, it is not clear yet whether areas in which routinely collected data will be used.</p> <p><b>How have the data been used to inform pharmaceutical policies and clinical practice?</b> Routine collected data from the NERIS have been used for the production of annual reports for the health insurance fund, independent on particular groups of high-cost medicines prescribed in general terms.</p>
<h4>Austria</h4> <p>Routine level data on prescribed and dispensed medicines are prescribed by physicians, dispensed by pharmacies.</p> <p><b>Sources</b> Reimbursement claims are the main source of routinely collected data at the national level covering 100% of the Austrian population.</p> <p><b>Database characteristics</b> Routine data are collected from all general, hospital and specialist medicines as well as the national Medicines Management System, which has been operational since 2011 and 2012. The database contains complete data on usage of prescribed, dispensed and reimbursed medicines between 2011 and 2012 as the latest year available.</p> <p><b>Who can access these data?</b> The Ministry of Health and the National Agency for Health and Consumer Protection (NAG) have access to aggregated data.</p> <p><b>What are routinely collected data used for?</b> Measuring trends in prescribing, quality and safety, evaluating effectiveness and safety.</p> <p><b>How have the data been used to inform pharmaceutical policies and clinical practice?</b> Routinely collected data are not used to inform price setting or reimbursement levels in Austria.</p>	<h4>Finland</h4> <p>Routine level data on prescribed and dispensed medicines are routinely collected in Finland. These data include information on medicines that are prescribed by physicians, dispensed by pharmacies.</p> <p><b>Sources</b> Community pharmacy records transmitted by pharmacies and completed by prescribers working in general practice, ambulatory care centres and hospitals are the main sources of routinely collected data in Finland.</p> <p><b>Database characteristics</b> Routine data are collected routinely and made available in the National Register of Ambulatory Health Services (RPA) database at the national level, covering 100% of the level prescriptions.</p> <p><b>Who can access these data?</b> Employees of the data controller (Institute of Health Information and Statistics) have access to aggregated data files on an ad-hoc basis.</p> <p><b>What are routinely collected data used for?</b> Since the NERIS database has only been operational since January 2018, it is not clear yet whether areas in which routinely collected data will be used.</p> <p><b>How have the data been used to inform pharmaceutical policies and clinical practice?</b> Routine collected data from the NERIS have been used for the production of annual reports for the health insurance fund, independent on particular groups of high-cost medicines prescribed in general terms.</p>



# Routine data are widely collected across the OECD & EU



**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.*

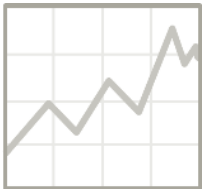
# What influences the use of RCD to inform policies?

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## **Accessibility: data governance, interoperability and data infrastructure**

- Information infrastructure and health data governance allowing record linkage across different custodians
- Legal barriers may limit access to routinely collected data for secondary purposes, mainly due to data privacy issues
- Cross-border data sharing challenged by data incompatibility, fragmented softwares



## **Applicability: capacity to generate evidence**

- Countries unevenly prepared to harness the potential of RCDs
- Knowledge-sharing could be enhanced
- Some databases are used extensively in pharmaco-epidemiological research;
  - Nordic Prescription Registries
  - CPRD, United Kingdom
  - SNDS, France

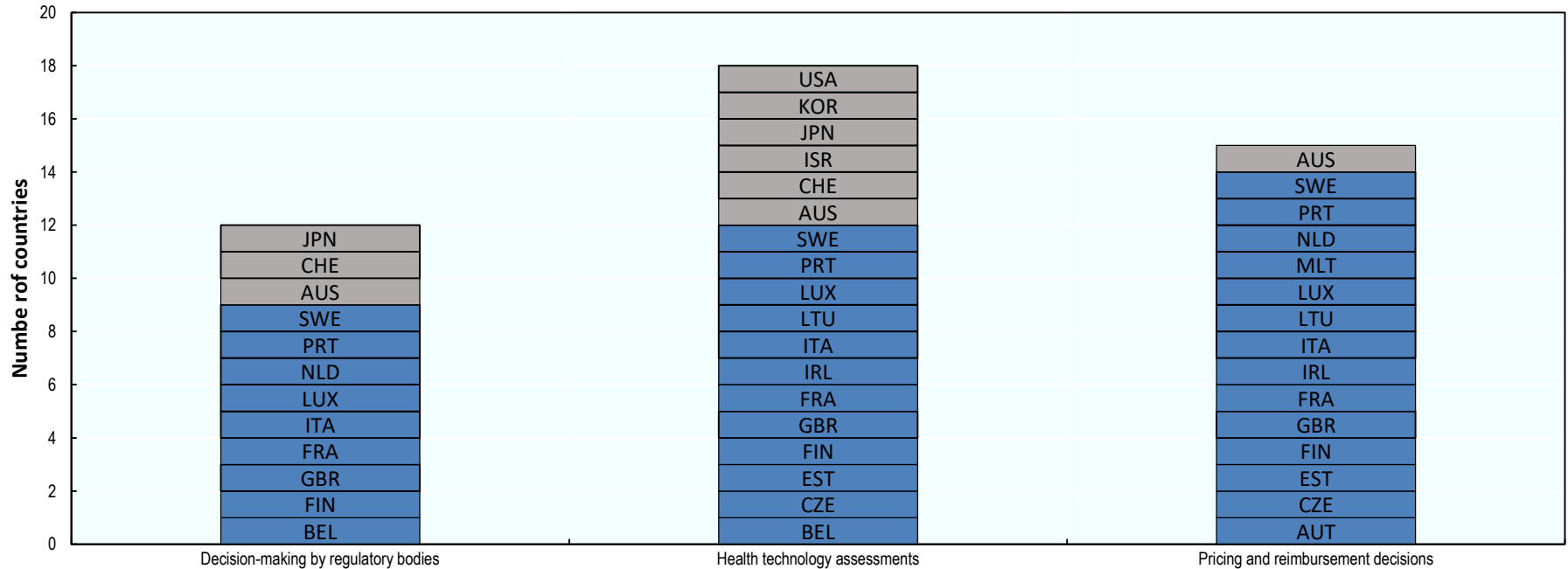


# Health systems mainly use RCD to monitor spending and compliance with guidelines





# Actionability of evidence from clinical practice from monitoring to policy impact



Blue colour indicates EU Member States, grey colour indicates non-EU OECD member countries.  
Source: OECD 2018 Survey on routinely collected data



# .....and a few examples of how health systems use RCD in pharmaceutical policies

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## Safety alerts

- **EMA** – testosterone products subject to strict surveillance due to safety concerns
- **Australia** – stronger risk mitigation measures in prescribing valporate for women of child-bearing age
- **France** – HPV vaccine maintained, while Benfluorex (Mediator®) was withdrawn from market

## Clinical practice guidelines

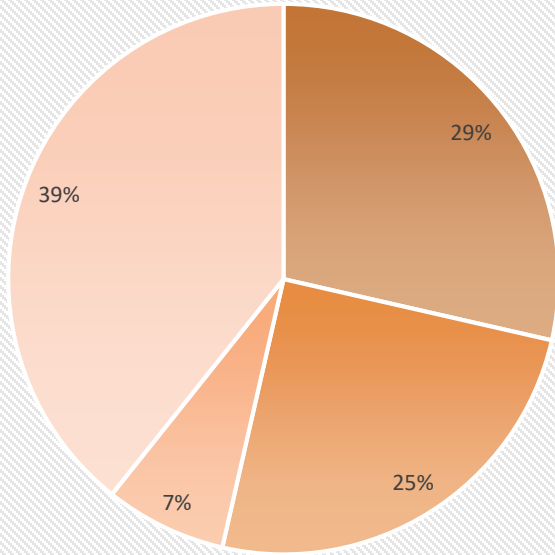
- **Australia** – improving quality of ADHD prescribing in children
- **Israel** – lowering cholesterol levels by using statins did not have significant impact on outcomes, clinical guidelines maintained
- **United Kingdom** – continuation of pertussis vaccination programme

## Reimbursement policies/pricing

- **Finland** – Impact assessment of generic substitution and reference pricing for antipsychotics
- **France** – delisting of a specific type of hormonal contraceptives



# What limits the use of RCD ?



- Legislation to safeguard patient privacy
- Inadequate information technology infrastructure
- Poor data quality
- Lack of analytical capacity, including human resources





# What does the future hold for RCD?

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Developing **data quality** and **methodologies** on how to use routinely collected data may increase leverage of RCD and evidence from clinical practice in medicines management



Improved data infrastructure and governance are key elements in order to achieve better accessibility and applicability of RCD



Health systems **can do more to exploit the potential** of routinely collected data and enable cross-border knowledge sharing



# Thank you for your attention

## Using routinely collected data to inform pharmaceutical policies

Health systems routinely collect vast amounts of patient-level data. These data offer increasing opportunities to distil evidence from clinical practice, and to assess and monitor the effectiveness and safety, benefits and the costs of health care interventions. In many OECD and EU member countries, the breadth and volume of routinely collected electronic patient-level data are reaching a crescendo, but their capacity to generate and use evidence to inform health policies varies considerably.

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 policy.

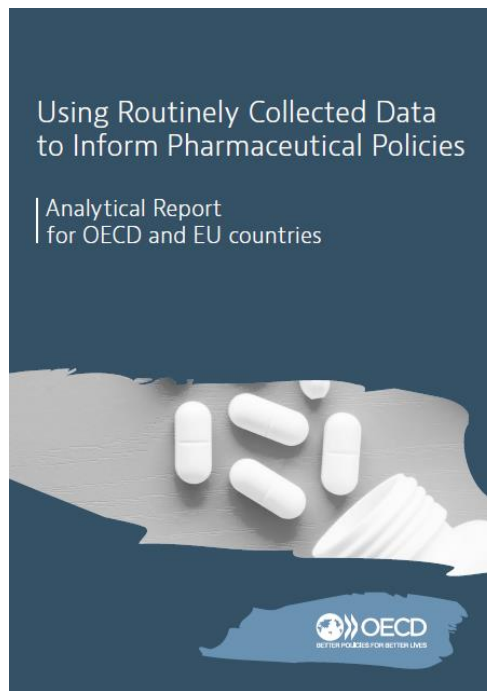
- Download [Using routinely collected data to inform pharmaceutical policies: Analytical Report](#)
- Download the [EU/EEA Country Notes](#)



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<http://www.oecd.org/els/health-systems/routinely-collected-data-to-inform-pharmaceutical-policies.htm>  
[https://ec.europa.eu/health/policies/costeffective\\_medicines\\_en](https://ec.europa.eu/health/policies/costeffective_medicines_en)