Introduction

Rare diseases are a significant public health issue in Europe, affecting an estimated 30 million people. These diseases are often chronic, debilitating, sometimes life-threatening, and can have a profound impact on patients' quality of life. This is why the Commission has been active in addressing rare diseases for more than 20 years now.

One of the flagship activities of the Commission in the field of rare diseases is the European Reference Networks (ERNs) initiative. Created under the Directive on patients' rights in cross-border healthcare ([1]), the ERNs were launched in March 2017. The ERNs are cross-border networks that bring together European hospital centres of expertise to tackle rare, low prevalence and complex diseases and conditions requiring highly specialised healthcare. The ERNs enable specialists in Europe to discuss cases of patients affected by rare, low-prevalence and complex diseases, providing advice on the most appropriate diagnosis and the best treatment available. Having increased in scope and size since their establishment in 2017, the ERNs now comprise 24 Networks, including 1,606 clinical centres belonging to 375 hospitals across 27 EU Member States and Norway.

DG SANTE has taken the initiative to produce this report in order to showcase the growth and professionalization of the ERNs since their inception in 2017. Moreover, the publication of this data serves to provide an insight into the different areas of work of the ERNs, their reach, impact and added value for patients leaving with rare diseases and their families. By publishing this report, DG SANTE aims to increase awareness and visibility of the work of these 24 Networks, which are a flagship activity of the Commission in the field of rare diseases.

This is the first time that a monitoring report on the ERNs activity is produced for publication. The report takes into account the feedback received from the ERN Coordinators. The report is available on the Europa website: European Reference Networks - European Commission.

The work of the ERNs has been organised in the ERN grants of 2023-2027 around seven core areas, listed below. This allows, among other things, consistency across the 24 ERNs in terms of structure, reporting and monitoring as well as enabling more efficient synergies and sharing of best practices. This report follows the structure of the 2023-2027 grants. The seven core areas of work are:

1. **Coordination:** general organisation and coordination of the ERNs.

2. **Dissemination:** communication and dissemination of the activities of the ERNs.

([1]) Directive 2011/24/EU of the European Parliament and of the Council of 9 March 2011 on the application of patients' rights in cross-border healthcare

3. **Evaluation:** development of a sound evaluation methodology to capture and measure different activities of the network.

4. **Healthcare and Clinical Patient Management System (CPMS):** use of the telemedicine platform for cross-border clinical discussions.

5. **Registries:** use of registries and their expansion with respect to the EU Rare Disease Platform and under the European Health Data Space.

6. **Training and Education:** development and implementation of education and training activities on rare diseases aimed at healthcare professionals, young doctors and medical students.

7. **Clinical Practice Guidelines and other Clinical Decision Support Tools:** assessment, development, update and dissemination of Clinical Decision-making tools.

The work of the ERNs is reported to the Commission via regular data collection exercises, known as the continuous monitoring of the ERNs. The monitoring takes place in a single data collection per year, due in March, covering the period from January to December of the previous year. This monitoring is based on a set of 24 indicators which altogether cover the seven core areas of the ERN grants. The purpose of the indicators and the value of the data provided by the ERNs is pivotal: it illustrates the progress across the seven core areas of ERN work and helps to show and substantiate the added value of ERN activities and areas for improvement.

The 2025 data collection exercise focuses on these indicators, as described in the table below:

Indicator	Inclusion in the 2025 Report	Core Area of Work
1. ERN Member (HCP) Performance Indicator Score	Yes	1
2. Website traffic dataset	No	2
3. Number of downloaded documents from ERN website	Yes	3
4. Number of dissemination webinars	Yes	2
5. Number of webinars attendees	Yes	2

6. Number of new patients referred to the HCPs of the ERN with the diagnosis of a disease or condition that falls within the scope of the ERN	Yes	4
7. Number of patient cases discussed in the IT platform for cross-border clinical discussions (CPMS)	Yes	4
8. Active participation in the new CPMS development, testing and roll-out	Yes	4
9. Implementation of the pilot scheme for reimbursement and drafting of recommendations for improvement	No	4
10. Number of new patients (entering the registry)	Yes	5
11. Percentage of the total ERN patients that are included in the registry(ies)	Yes	5
12. Mapping of the registries/data sources in all the clinical units constituting each ERN (i.e., provide a list of the existing patient data sources in the clinical units of the ERN that are relevant for the ERN work on registries)	No	5
13. Metadata of the registries/data sources provided to the Directory of Registries and Central Metadata Repository of the Joint Research Centre	No	5
14. Design, proposition and implementation of a practical technical model to connect and make registries interoperable (using the European Rare Diseases Registry Infrastructure, tools and services)	No	5
15. Implementation of pseudonymisation, data linkage and data transfer services in line with JRC recommendation (SPIDER)	No	5
16. Mapping of the use of orphacodes in all clinical units	Yes	5
17. Number of accredited Training Courses developed by the ERNs (not congresses, conferences, events which do also carry CME credits)	Yes	6
18. Number of trainees who completed accredited Training Courses	Yes	6

19. Number of countries of origin of trainees who completed accredited Training Courses	Yes	6
20. Number of non-accredited training courses developed by the ERN	Yes	6
21. Number of trainees who completed the non-accredited training courses	Yes	6
22. Number of countries of origin of trainees who completed the non-accredited training courses	Yes	6
23. Number of Clinical Practice Guidelines developed, updated, or appraised	Partial	7
24. Number of Clinical Decision Support Tools developed, updated, or appraised	Partial	7

Six indicators (2, 9, 12, 13, 14 and 15) were not included in the 2025 data collection exercise for various technical reasons and will be included in future data collections.

Two indicators (23, 24) are partially included. The ERNs reported to DG SANTE on Clinical Practice Guidelines and Clinical Decision management tools but nuanced according to if they were adopted or written and released – this can be seen in the ERN indicator tables below.

Two indicators (6, 16) were provided directly by ERN members and Affiliated Partners. The remaining ones were provided by the ERN coordination teams.

The report is organised into two chapters: the first chapter provides an overview of all the ERNs data submitted per indicator, while the second chapter provides a country profile of each Member State and Norway including a statistical overview of the country's participation across the ERNs.

Data Limitations

There are some limitations to the data presented in this report. Firstly, the direct submission of data from members and affiliated partners does not reach 100% of submissions, as illustrated in figure 1.

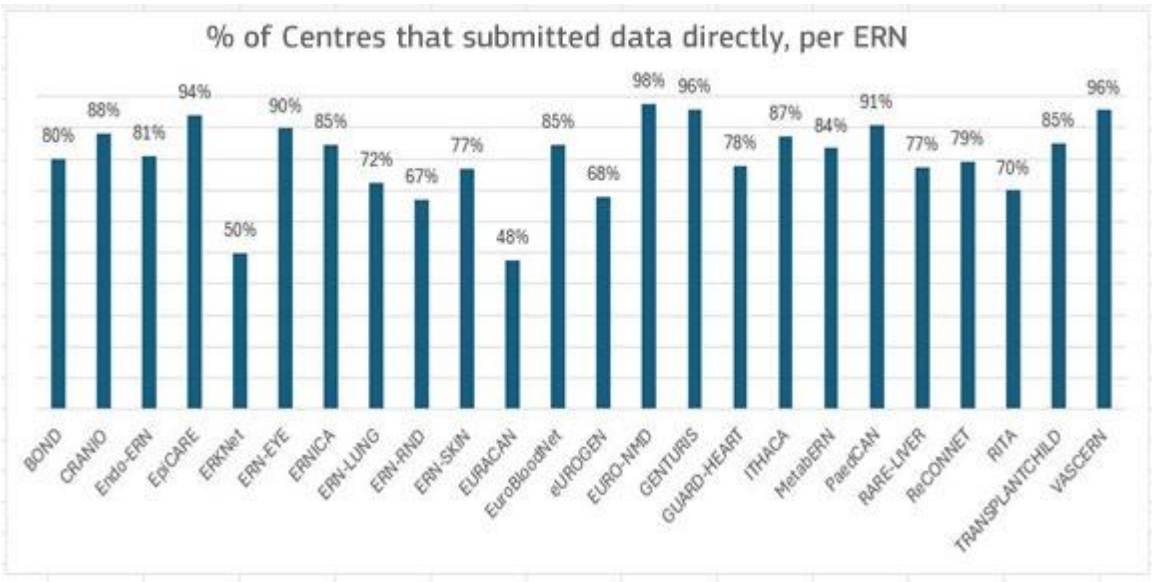

Figure 1. ERNs members and affiliated partners submission level

Secondly, for comparative purposes, this report has included data of 2023. Non-comprehensive data submission results in empty data points for certain indicators.

Thirdly, certain data may reflect different interpretations of the indicator and thus is heterogeneous across the ERNs.

Fourthly, the processing of the submitted data has not yet been fully automated and may therefore still include human errors.

Overall, the collection of data from the ERNs and the processing of this data needs further improvement going forward. The data limitations also render the analysis of the indicators challenging and therefore this was omitted in this report. Improvements going forward include automation of data processing; homogeneous interpretations of indicator definitions; inclusion of qualitative context; and comprehensive and accurate reporting from ERN members and affiliated partners.