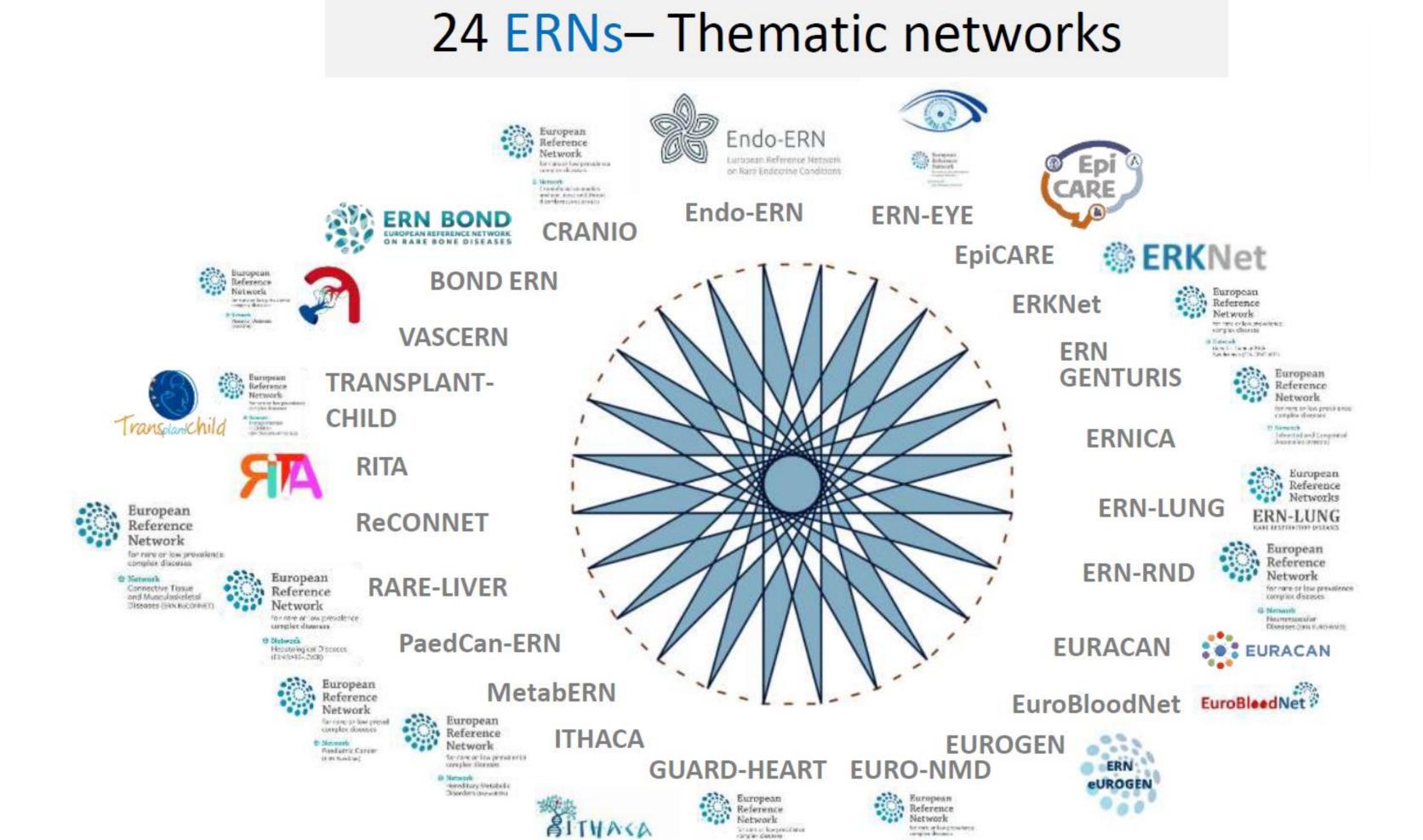
# European Reference Networks



## European Reference Networks

- Operational since 2017
- As of 2024, the ERNS include 1,619 specialised centres in 382 hospitals across 27 Member States and Norway.
- Focus on healthcare
- Created under <u>Directive</u> 2011/24/EU on patients' rights in cross-border healthcare.



To says to leavy residence varieties discourse

## European Reference Networks created added value



- European partnership
- Structural integration of patient organisations
- Knowledge and standards: Collect, make available
- Produce new knowledge, standards and data
- Increase equity of care
- E-health for cross-border care ("knowledge travels, not the patient")

## 24 ERNs have been established in 2017

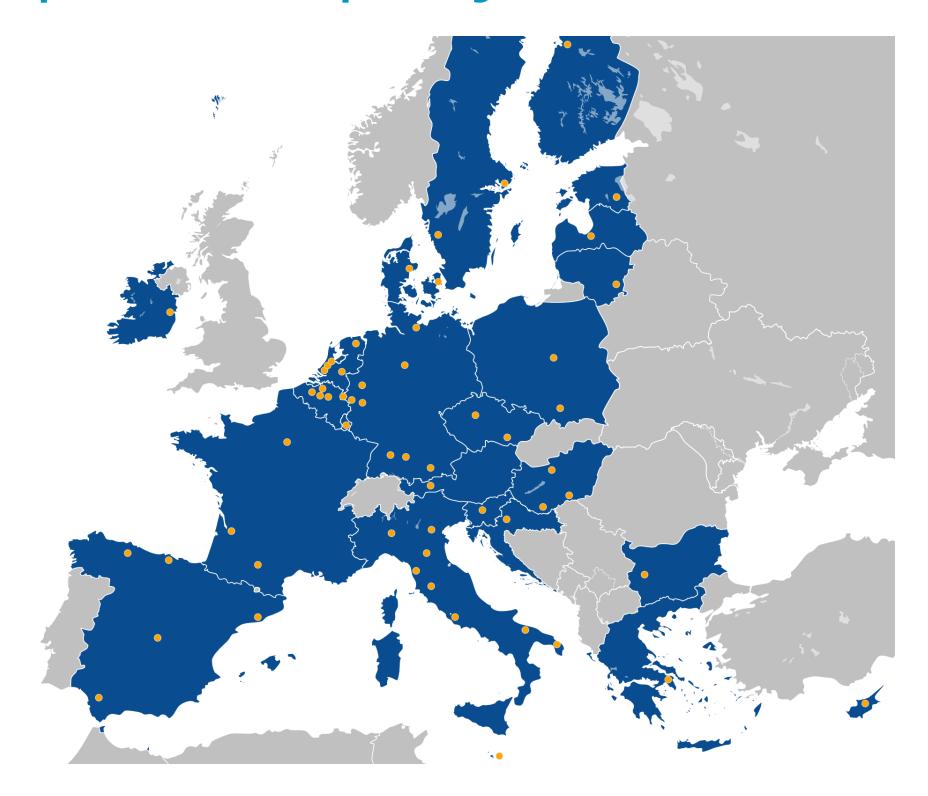
- ERN Bond
- ERN Cranio
- Endo-ERN
- ERN EpiCARE
- ERKNet
- ERN-RND
- ERNICA
- ERN Lung
- ERN Skin
- ERN EURACAN

- ERN EuroBloodNet
- ERN eUROGEN
- ERN Euro-NMD
- ERN Eye
- ERN Genturis
- ERN Guard-Heart
- ERN ITHACA
- MetabERN
- ERN PaedCan
- ERN Rare-Liver

- ERN ReCONNET
- ERN RITA
- ERN Transplant-Child
- VASCERN

# ERN-RND – European Reference Network for rare neurological diseases

- 68 expert centres in 24 EU countries (medium large ERN)
  - + supporting partners
- > 44.000 patients per year (adults and paediatric)



| Country        | N members | Country     | N members |
|----------------|-----------|-------------|-----------|
| Austria        | 1         | Greece      | 1         |
| Belgium        | 4         | Hungary     | 3         |
| Bulgaria       | 1         | Ireland     | 1         |
| Croatia        | 1         | Italy       | 9         |
| Cyprus         | 1         | Lithuania   | 1         |
| Czech Republic | 4         | Netherlands | 6         |
| Denmark        | 2         | Poland      | 2         |
| Finland        | 1         | Slovenia    | 1         |
| France         | 6         | Spain       | 8         |
| Germany        | 9         | Sweden      | 2         |
| Country        | N members |             |           |
| Estonia        | 1         |             |           |
| Latvia         | 1         |             |           |
| Luxembourg     | 1         |             |           |
| Malta          | 1         |             |           |

### Governance

- ERN-RND Board
- ERN-RND ePAG
- ERN-RND Management
   Team
- ERN-RND Advisory Board
- ERN-RND Coordination
   Office
- Disease Expert Groups and Working Groups
- Cross-ERN working groups

#### **Cross-ERN working groups**

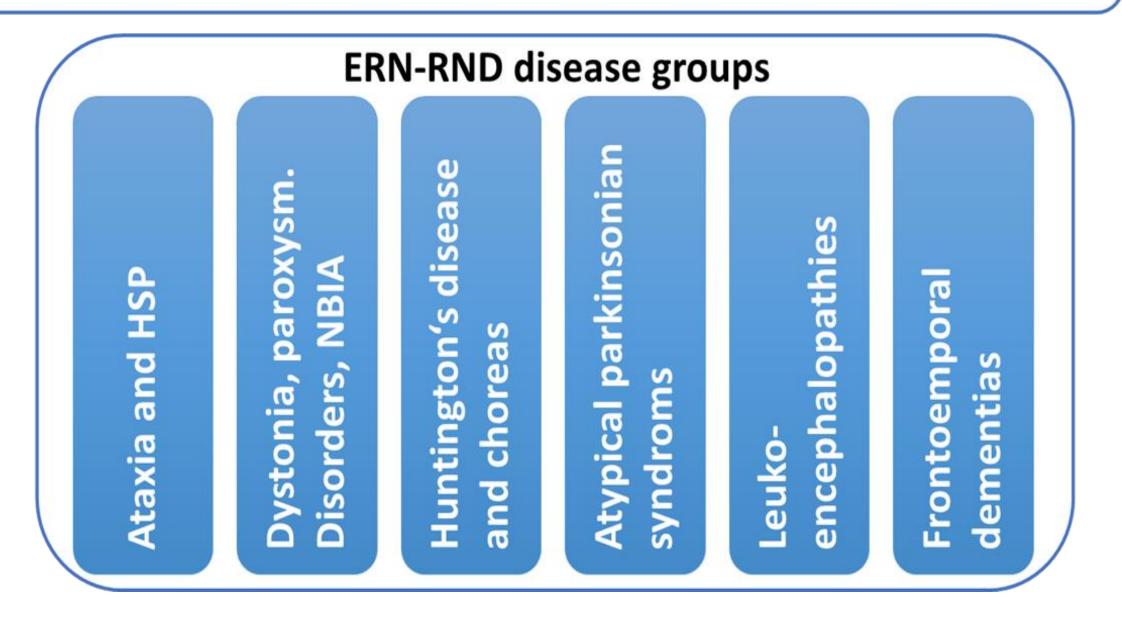
**Cross-cutting themes:** Joint training curriculum, NGS, Registry and European health data space, Genetic therapy and stem-cell transplantation, Surgical therapies

**Disease overarching themes:** Mitochondrial diseases, Channelopathies, Neurophysiology / myoclonus, Neurometabolic diseases

#### **ERN-RND** transversal working groups

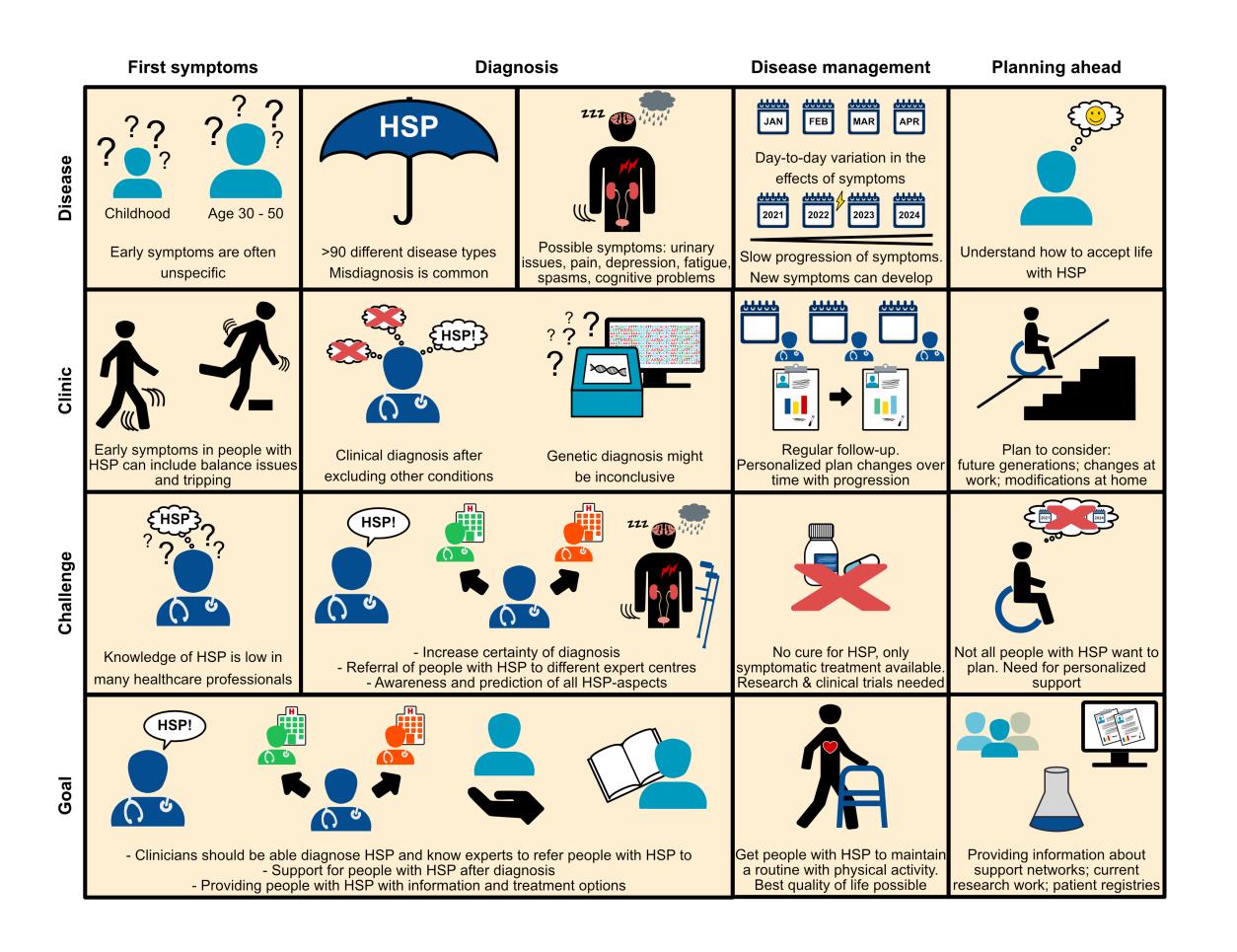
**Neuropediatric issues** 

Neurorehabilitation



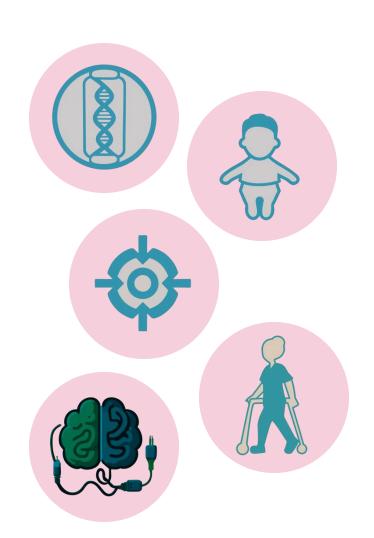
### Core activities of ERN-RND

- Crossborder healthcare / CPMS
- Training and education of health professionals
- ERN-RND registry
- Guidelines and Clinical Decision Support Tools / care standards
- Patient journeys
- Dissemination



Example: Patient Journey for Hereditary Spastic Paraplegia

## ERN-RND - mode of action for improvement of care equity



# Mapping of care inequalities

Next Generation Sequencing
Neuroimaging
Botulinum toxin treatments
Deep Brain Stimulation
Stem Cell Transplantation
Neurorehabilitation
Intrathecal baclofen
Paediatric (off-label) medication
Genetic therapies

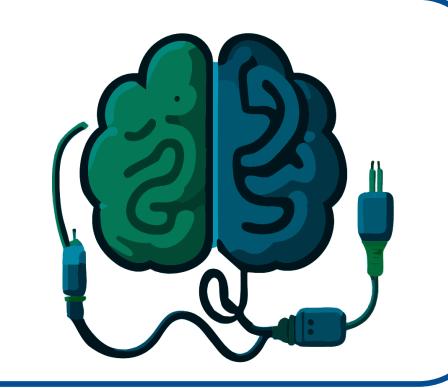
Design of intervention(s)

ERN-RND tool-box

Measurement of effect

# Cross-Border healthcare pathway: DBS in Dystonia

Standard pathway for harmonizing & optimizing DBS management decisions in Dystonia patients.



Harmonizing care

Harmonizing care

Consensus on best

consensus on be

Crossborder healthcare

Online multidisciplinary Board for DBS in Dystonia Online Learning

Expert webinars and post-graduate curriculum

F2F Exchange Symposium in Würzburg, Germany 2025 Hands-on training

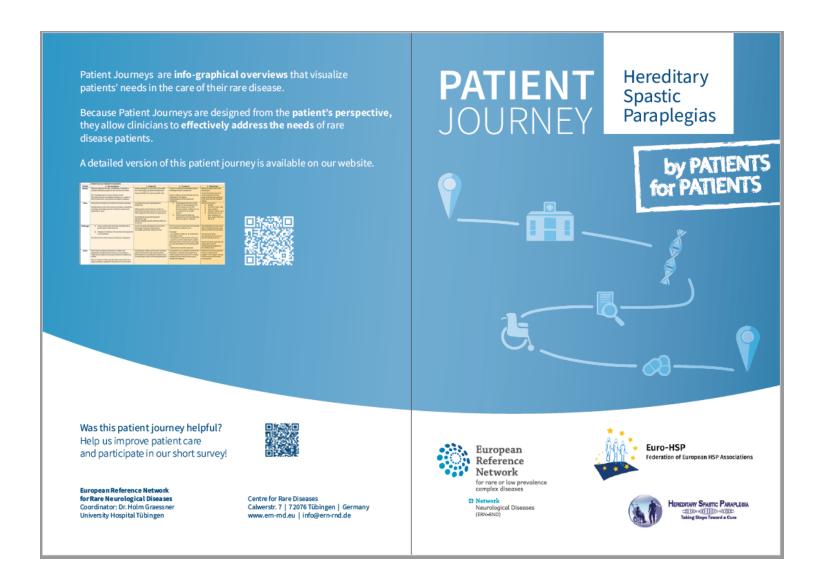
Hands-on training

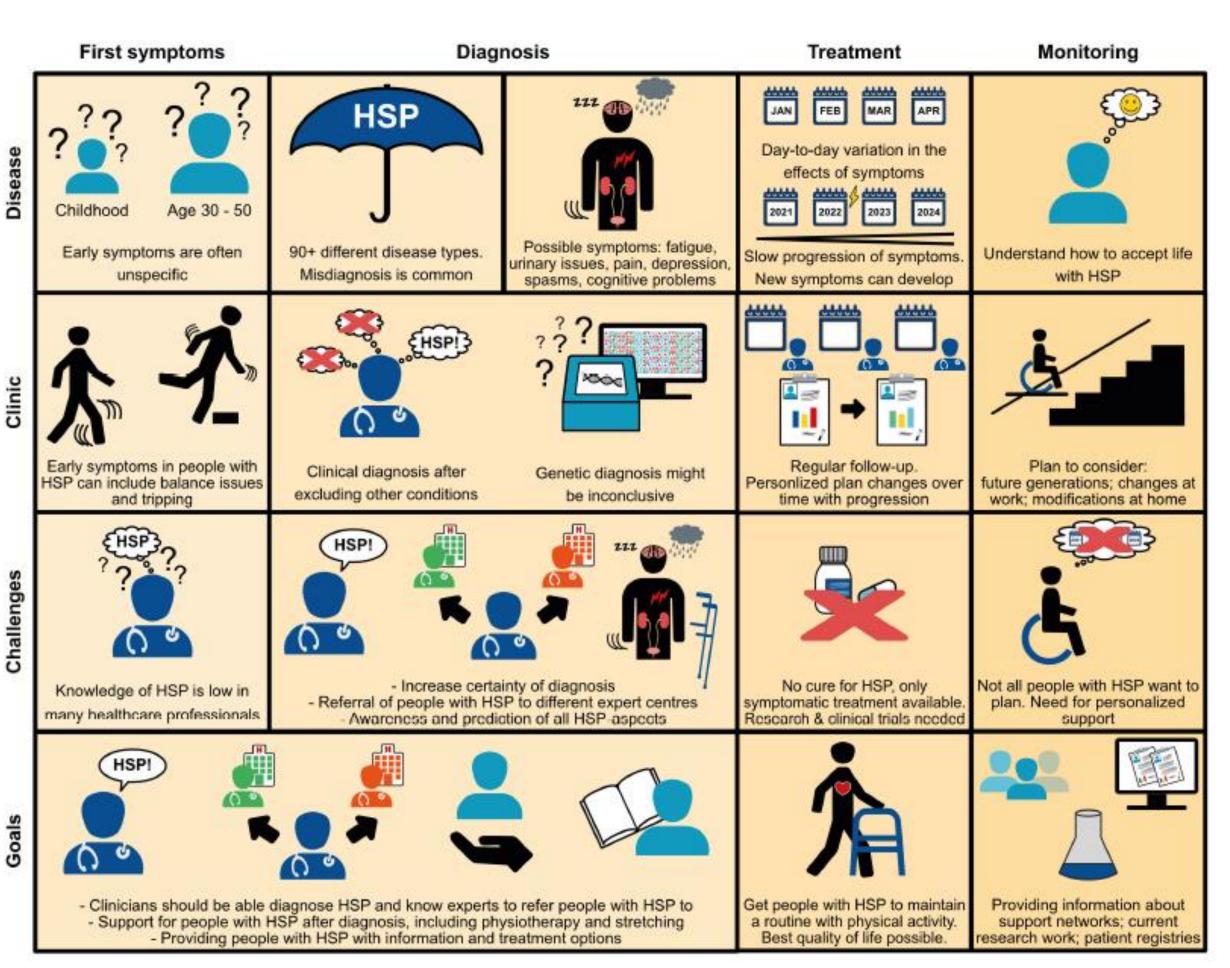
Exchanges to DBS expert

centers

# Impact on patient care – Success Story – Patient journeys

- Led by ePAGs
- All ERN-RND disease areas
- Main European languages
- Goal: hand out a suitable patient journey to all newly diagnosed patients





HSP Hereditary Spastic Paraplegias

Please note that specific terms (e.g. home care services, general physician, physiotherapy) do not include the same services in all EU countries and might differ from country to country. Patient advocacy groups can often provide support and resources for patients and families.

#### Disclaimer

ERN-RND specifically disclaims any warranties of merchantability or fitness for a particular use or purpose. ERN-RND assumes no responsibility for any injury or damage to persons or property arising out of or related to any use of this information or for any errors or omissions.



# Registry

|                         | 2021 | 2022 | 2023 |
|-------------------------|------|------|------|
| No of centers sent data | 8    | 28   | 37   |
| No of datasets received | 1872 | 4960 | 7922 |

No of centers signed Data Sharing Agreement: 47

### Further activities during the last year:

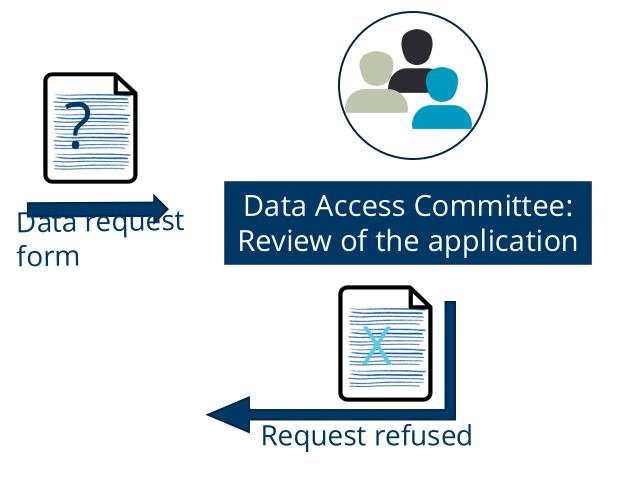
- Data monitoring and upload into the REDCap database
- Data Quality Report for all HCPs who have submitted data
- Data analysis
- Data Access Committee and Process up and running
- Survey of other ERN registries: codification and numbers of patients without determined diagnosis

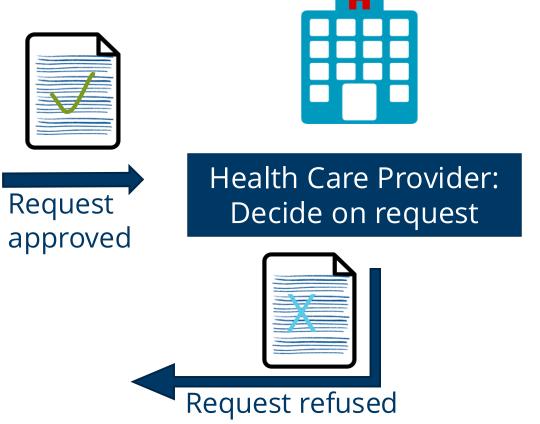
#### Data access:



#### Applicant: Request for data access

- Clinicians and researchers (internal and external)
- Regional, national and EU health authorities, policy, agencies
- Patient organizations
- Non-governmental organizations









## HCP and Applicant: Data access/exchange

- Get in direct contact
- Decide together on data exchange
- Inform ERN-RND management

# Summary

- ERNs are cross-border collaborative patient-centered networks that bring together European hospital centres of expertise and reference
- ERNs create value for rare, low prevalence and complex diseases and conditions requiring highly specialised healthcare
- ERNs facilitate research



European Reference Networks



## Centers of Excellence

SJD Barcelona Children's Hospital



European Reference Networks



# Centers of Excellence

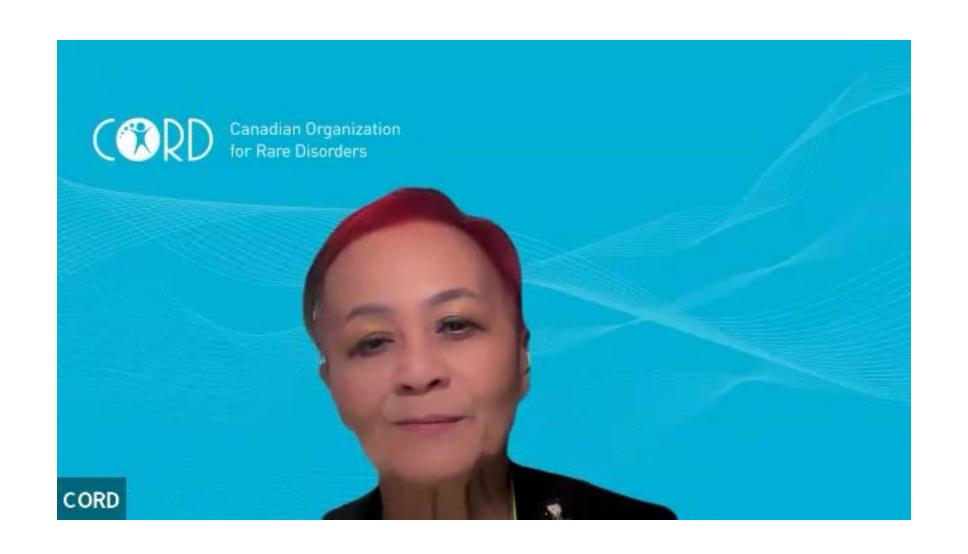
# NoRo Center Romania



## NoRo Rare Disease Centre

Interview with Dorica Dan, Psychologist, Parent of daughter with Prader-Willi syndrome and Founder of NoRo Center – the Pilot Reference Center for Rare Diseases in Zalău





Durhane Wong-Rieger, PhD
President & CEO
Canadian Organization for Rare Disorders



