



European  
Commission

**SNOMED CT EXPO 2017**  
**Bratislava, 19 October 2017**

**#ERNEU**  
**@EU\_Health**

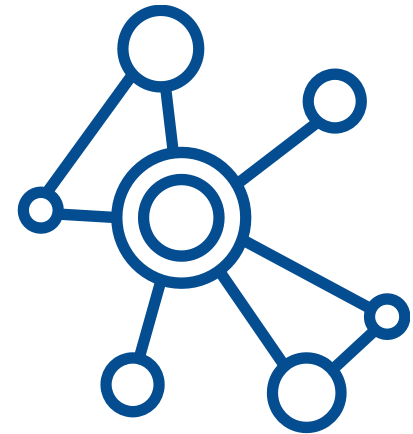


**European  
Reference  
Networks**

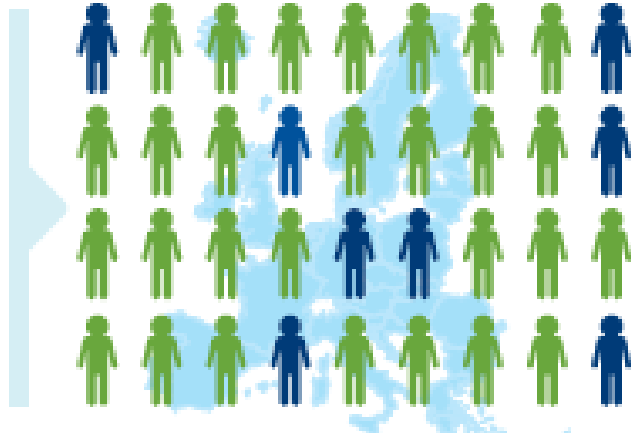
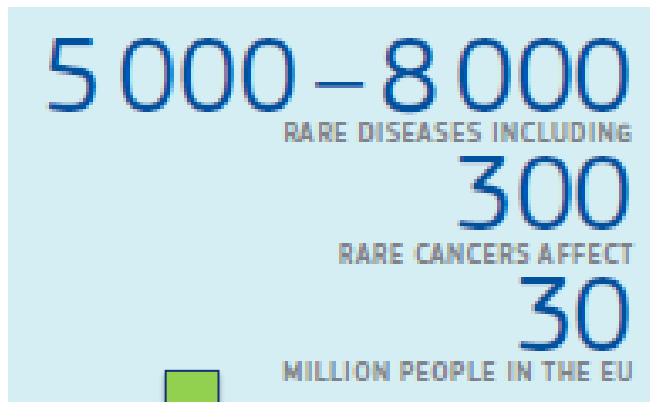
***Tapani PIHA***  
*Head of Unit*  
*Cross-border healthcare and eHealth*  
*Directorate-General Health and Food*  
*Safety (DG SANTE)*

## "The knowledge travels, not the patient"

- **Treat and diagnose patients:**  
exchange clinical **data on patient cases** at a distance
- **Develop and exchange expertise**  
through the network and across the EU
- **Networking, research and training**
- **Patient management software for virtual care**



## The Rationale



- Many affected by a **rare or complex condition** do not have access to diagnosis and high-quality treatment.
- Expertise and **specialist knowledge** may be **scarce** because patient numbers are low
- **No country alone** has the knowledge and capacity to treat all rare and complex diseases.
- **Important delay in diagnosis** because lack of knowledge or right referral systems
- **Lack of diagnostic capacity** (tests) and treatments in many cases

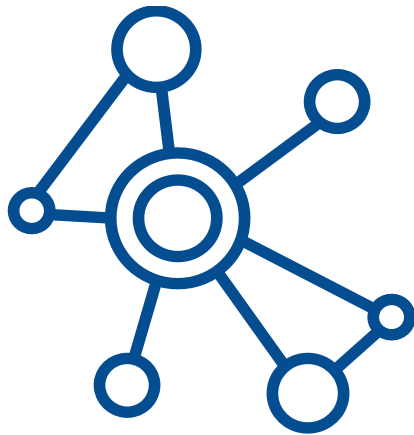


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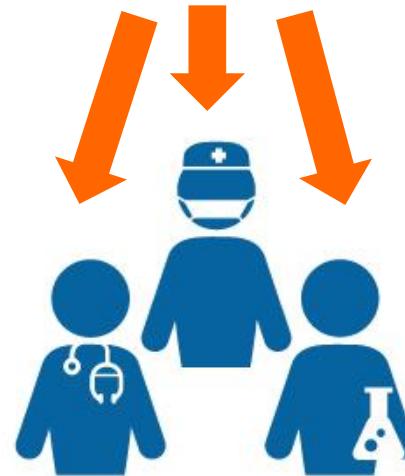
Networks

26 COUNTRIES



> 300  
HOSPITALS

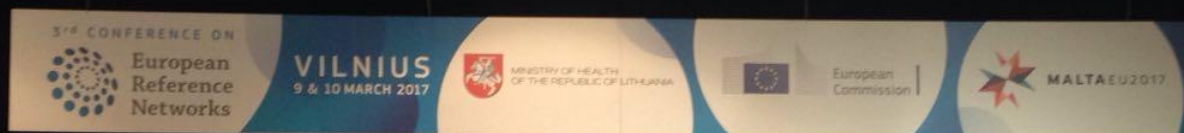
Full  
Member



> 900  
HEALTHCARE UNITS

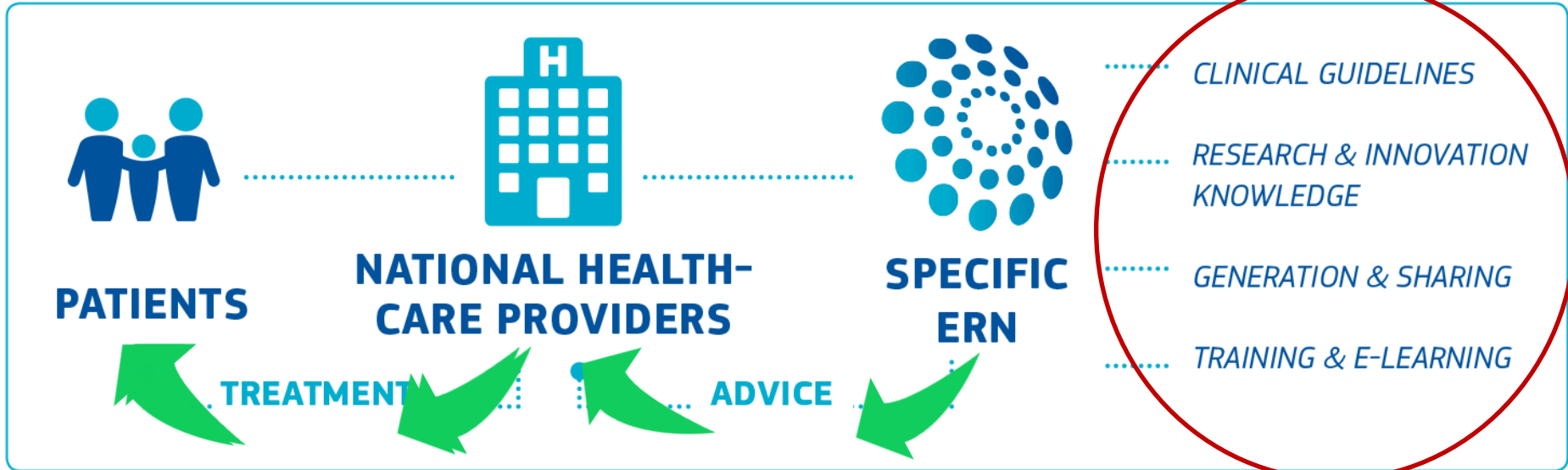
Health

**AWARD CEREMONY**  
**3rd European Reference Networks Conference**  
**9 March 2017 - Vilnius, Lithuania**



<b>BOND ERN</b>	Bone Diseases	<b>EuroBloodNet</b>	Onco-Hematological Diseases
<b>CRANIO</b>	Craniofacial anomalies and ENT disorders	<b>EUROGEN</b>	Urogenital Diseases
<b>Endo-ERN</b>	Endocrine Conditions	<b>EURO-NMD</b>	Neuromuscular Diseases
<b>EpiCARE</b>	Rare and Complex Epilepsies	<b>GUARD-HEART</b>	Diseases of the Heart
<b>ERKNet</b>	Kidney Diseases	<b>ITHACA</b>	Congenital Malformations and Intellectual Disability
<b>ERN GENTURIS</b>	Genetic Tumour Risk Syndromes	<b>MetabERN</b>	Hereditary metabolic diseases
<b>ERN-EYE</b>	Eye Diseases	<b>RARE-LIVER</b>	Hepatological Diseases
<b>ERNICA</b>	inherited and congenital anomalies	<b>ReCONNET</b>	Connective Tissue and Musculoskeletal Diseases
<b>ERN-LUNG</b>	Respiratory Diseases	<b>RITA</b>	Immunodeficiency, AutoInflammatory and Auto Immune Diseases
<b>ERN-RND</b>	Neurological Diseases	<b>TRANSPLANT-CHILD</b>	Transplantation in Children
<b>ERN-Skin</b>	Skin Disorders	<b>VASCERN</b>	Multisystemic Vascular Diseases
<b>ERN Paedcan EURACAN</b>	Rare Paediatric Cancers Solid Adult Cancers		

# Share. Care. Cure.



**Virtual  
clinical care**

**Research**

**Knowledge generation**

Health

# Key role of the Member States

## Member States

- Recognise HCPs or centres of expertise at national level
- Endorse applications

## Board of Member States

- Develop strategy
- Approve Networks and their members



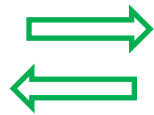


## Challenges for the near future



- Integration of ERNs into the National Healthcare systems
- Referral systems and patient pathways at national level
- Support of the ERN clinics and ERN networks
- Sustainability

# Actors



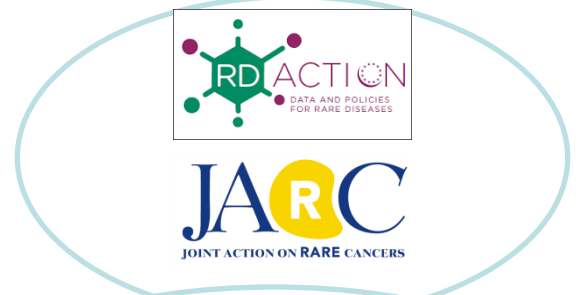
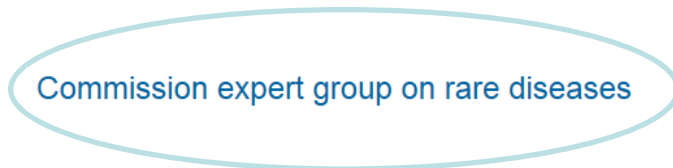
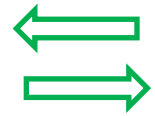
# BoMS



# ERNs' Coordinators



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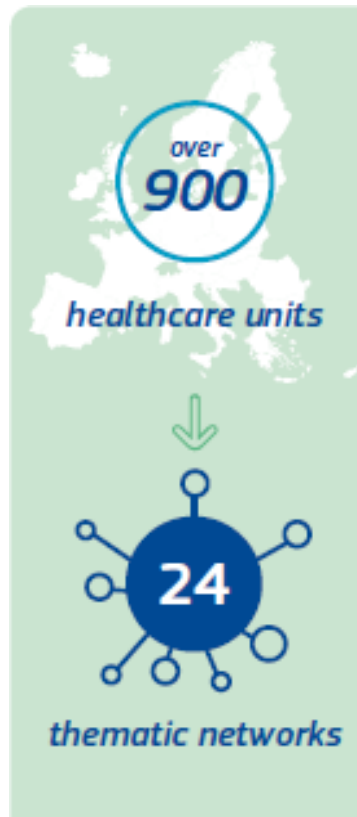
# DG SANTE



DG CONNECT  
DG RTD  
JRC



# Clinical Patient Management System



- Building the ERN Clinical Patient Management System is a huge challenge.
- No such multi-country clinical system exists yet.
- We can expect many organisational, semantic and technical challenges.

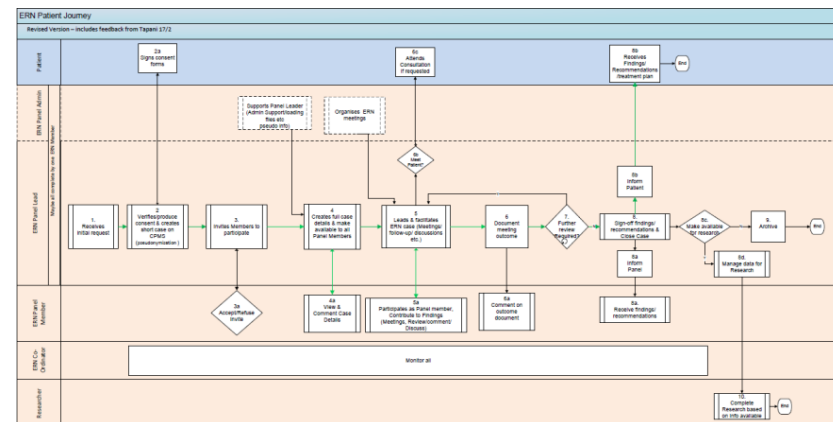
# Clinical Patient Management System

## Software as a Service – key parameters

- *Planned delivery of the first version in 2017*
- *Proven, working, existing software*
- *Sharing of clinical data, including medical imagery*
- *All the ERNs use the same system*

# Clinical Patient Management System

1. Register the patient enrolled into an ERN consultation  
*Confirm and record the patients' consent*
2. Share clinical, pseudonymised data on the patient  
- Consultation process to arrive at clinical conclusions on diagnosis and treatment
3. Archive the patient case data, forming the ERN patient register  
*Optionally transfer data to research projects*



## Registries under the Health Programme 2017

- **ERK-REG** - ERKNet Registry for Rare Kidney Diseases
- **EuRRECa** - European Registries For Rare Endocrine Conditions
- **PARTNER** - ERN-PAEDCAN Partner: Paediatric Rare Tumours Network - European Registry
- **Registry Warehouse** - RD Registry Data Warehouse
- **U-IMD** - Unified European Registry for Inherited Metabolic Disorders



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## ERN IT Platform

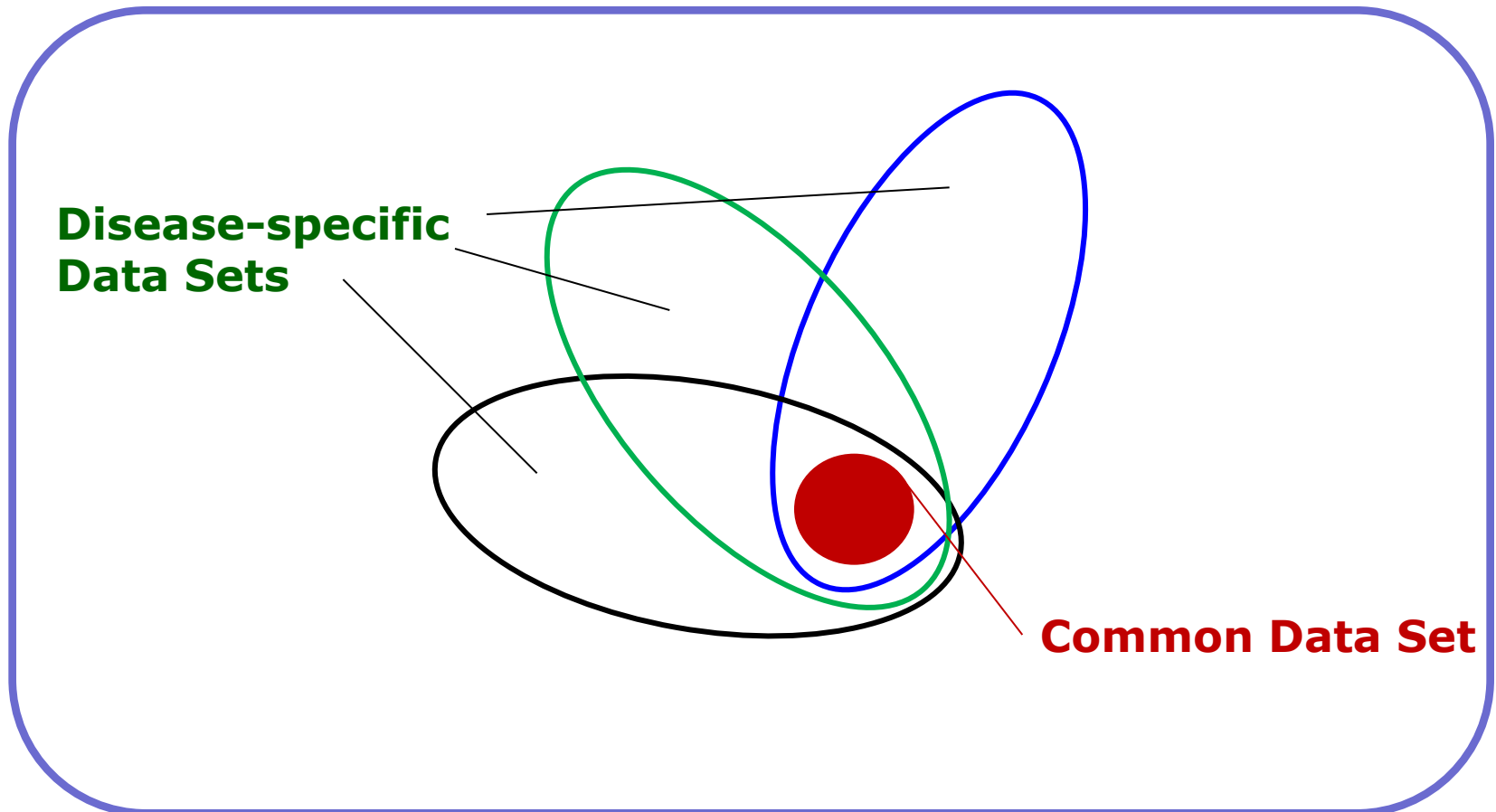
- ❑ **Registration of patient data for care / treatment purposes**
- ❑ **Virtual consultations**
- ✓ **Creation of new registries**
- ✓ **Interoperability of existing registries**

## EU RD Platform

- ✓ **Interoperability for the 600+ European registries, including ERN registries**
- ✓ **Support for creation of new registries**
- ✓ **Standards and tools for RD registries**



## Data sets





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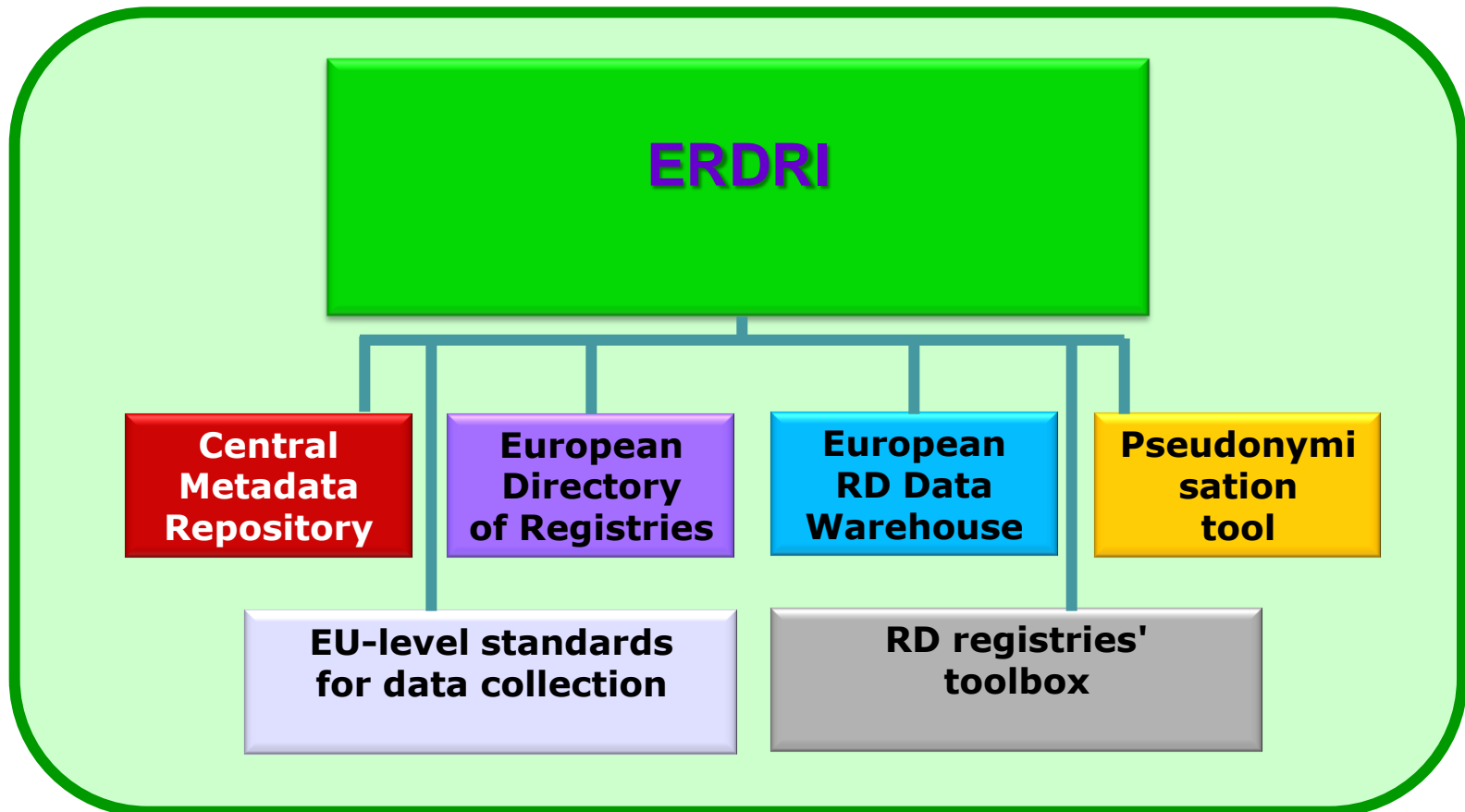
## EU RD Platform

EUROPEAN  
RARE DISEASE REGISTRY  
INFRASTRUCTURE  
(ERDRI)

EU-level standards for data  
collection and data sharing;  
Recommendations

Tools for data collection and  
data sharing;  
Training

# EU RD Platform



# Development and Maintenance of the European Platform on Rare Diseases Registration

**Directorate-General  
Joint Research Centre  
(DG JRC – F.1.)**

**Directorate-General  
Health and Food Safety  
(DG SANTE – C.1.)**



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## Expected impact of the ERNs for patients and professionals

- ✓ improve public and professional awareness of rare and complex diseases
- ✓ increase the likelihood of early and accurate diagnosis and effective treatment where available.
- ✓ platforms for the development of guidelines, training and knowledge-sharing.
- ✓ facilitate large clinical studies to improve understanding and develop new drugs
- ✓ An opportunity for networking with likeminded experts from across Europe — ending the professional isolation that many experts in rare diseases face.



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## Expected impact of the ERNs for the Healthcare systems and society

- ✓ Innovation in healthcare delivery is the cornerstone of the ERN system
- ✓ Incubators for the development of digital services for the provision of virtual healthcare.
- ✓ Development of new care models, and innovative medical solutions and devices, changing the way in which treatment itself is delivered.
- ✓ Will help to boost economies of scale and ensure a more efficient use of resources, with a positive impact on the sustainability of national healthcare systems.



@V\_Andriukaitis



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DG Health and Food Safety site  
[https://ec.europa.eu/health/ern/policy\\_en](https://ec.europa.eu/health/ern/policy_en)



# European Reference Networks



