



### **PARENT Joint Action**

### Iztok Štotl

#### **1st EUBIROD Network General Assembly** 24th August 2015, University of Surrey, Guildford, Surrey, UK

# PARENT (PAtient REgistries iNiTiative) - background

A Joint Action co-funded by the European Commission and some Member States (May 2012- November 2015).

- Overall objective:
  - to support the EU Member States in developing comparable and interoperable patient registries in clinical fields of identified importance (e.g. chronic diseases, medical technology).
- **Aim**:
  - to rationalize the development and governance of interoperable patient registries, thus enabling the use of secondary data for public health and research purposes in cross-organizational and cross-border setting
- **EUBIROD group** is a member of Associated Project Group (APG) of PARENT JA.

# Key issues patient registries experience

- unstable funding and therefore limited sustainability
- many legal issues concerning registry set-up, data protection and re-use; legal backgrounds in MS differ a lot
- roles of registry stakeholders although very important, often not very clear
- various modes of data collection, access and sharing
- lack of alignment to standards (process, semantic)
- data quality and context
- transparency and information quality

# PARENT Framework

Guidelines, Recommendations, Methodologies

### Best practices

Information models, ontologies, vocabularies

Services, SW tools repository

### Registry of Registries, Assessment Tool







**Knowledge Management Platform** 

**PARENT Framework** 





# **1. Methodological guidelines**

- Target group: registry holders, researchers, healthcare providers, developers, competent authorities responsible for registries
- Prepared by PARENT JA partners Croatia, Finland, Greece, Hungary, Slovenia, Spain and some experts; approximately 40 authors
- PDF and Wiki tool
- Available in October 2015
- Future: potential implementation/pilot testing within EMA, EUnetHTA



#### Page Discussion

# Methodological guidelines and recommendations for efficient and rational governance of patient registries

1. Introduction	2. Patient registries	3. Interoperability
4. Quality dimensions of registries	5. General requirements for cross-border use of patient registries	6. Creating a registry
7. Patient registry information system development and implementation	8. Running a registry	9. Changing and stopping registries
10. Re-use of registry data		

#### PARENT JA

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# 2. Registry of Registries (RoR) (www.parent-ror.eu)

#### BROWSE REGISTRIES

Currently collecting data

Primary observational unit

	Short registry name (English)	Country of operation	Primary purpose	Total number of cases	Total number of active cases	Primary observational unit	Governing board	Data linked from other sources	Part	Views <ul> <li>List</li> <li>Compare</li> <li>Advanced search</li> </ul>
	TestReg13	Denmark	Surveillance	13000	13000	A person / patient, A hospital discharge or a	Yes	Yes	Yes -	<ul> <li>Compare by survey topic</li> </ul>
	HU Database of the Hungarian Neonatal Int	Hungary	Statistics	40000	35000	A person / patient	No	No		
	HU TBC Surveillance System	Hungary	Surveillance	8473	901	A person / patient	Yes	No		<ul> <li>All registries in RoR</li> </ul>
	ES Girona Heart Registry	Spain	Surveillance	5000	3000	A person / patient	Yes	Yes		<ul> <li>Selected registries</li> </ul>
	HU Hungarian Pediatric Cancer Registry	Hungary	Statistics	10750	5000	A person / patient	Yes	Yes		
	HR Causes of death registry	Croatia	Statistics	581124	581124	A person / patient		Yes		Choose comparison fields
	HR Vaccine Adverse Event Registry	Croatia	Surveillance	3612		An event (please specify), AEFI	Yes	No		Country of operation
	HR CroDiab	Croatia	Surveillance	150000	110000	A person / patient	Yes	Yes		<ul> <li>Primary purpose</li> </ul>
	National Penile Cancer Registry	Sweden	Statistics	1997	1997	A person / patient	Yes	Yes		Other purpose(s)
	WebRehab	Sweden	Outcome	18000	18000	A person / patient	Yes	Yes		Type of holder
	LV Register of the patients with cancer	Latvia	Statistics	312345	70860	A person / patient	No	Yes		Current funding source
	LV Register of the patients with multiple scle	Latvia	Statistics	1825	1624	A person / patient		Yes		Registry started in
	LV Register of the patients with congenital a	Latvia	Statistics	12140		A person / patient	No	Yes		<ul> <li>Currently collecting data</li> <li>Total number of cases</li> </ul>
	HU Drug-related mortality	Hungary	Statistics			A person / patient	No	No		<ul> <li>Total number of active cases</li> </ul>
	HU TDI Database	Hungary	Statistics			An event (please specify),	No	No		Average no. of new cases (yr)
										Sources of registry data
<									>	Geographical coverage
										Registry type
			< 1 2	3 4	>					<ul> <li>Primary observational unit</li> </ul>
	HR Causes of death registry								3 × 2	Governing board
								L	<b>^</b>	Minimum data set
Country	of operation Cr	oatia		Registry	started in					Data security policies, and proce

	Data	security	policies,	and	procedures	
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- Data linked from other sources
- Participation in a network of registries
- Sharing data with interested parties
- Registry metadata standards

A person / patient Sharing data with interested parties No

Yes

Registry started in Geographical coverage Governing board Data model documented

National

# **RoR 2 - Core services**

- **Registry browsing:** search, registry details, registry metadata, customizable comparison tool
- Services:
  - registry quality and interoperability readiness assessment
  - data dictionary access
  - registry benchmarking
  - alignment with PARENT Guidelines
  - repository of archetypes (clinical models in openEHR) that can be reused

# **Descriptive statistics**



### **Assessment and comparison**



# **Description of the EUBIROD Activity in PARENT JA**

- EUBIROD representatives (M.Massi Benedetti, F.Carinci, I. Štotl) have participated in regular meetings of PARENT project, that were open for APG.
- EUBIROD project/initiative is mentioned and explained in guidelines as a good example and model to be re-used for other chronic diseases as well.
- EUBIROD PIA initiative has been identified and included in the guidelines as very useful and related with the goals of the PARENT project.
- I. Štotl presented a presentation about EUBIROD group approach regarding business models in platforms for cross-border use of patient data.

# **Description of the EUBIROD Activity in PARENT JA (2)**

- EUBIROD member registries have participated in series of structured interviews conducted for the purposes of the Cross-border patient registries initiative:
  - Cyprus Diabetes Registry
  - Slovenia Child Diabetes Registry
  - Latvia Register of Patients with Particular Diseases, Patients with Diabetes Mellitus
- Final report and results of interviews will be available as a result of PARENT WP4 (October 2015)





### Core services

ent	Service	Available now	Available by the end of 2015	For future developme nt
<b>RoR v1.0</b>	List of registries	+		
	Registries metadata	+		
	Questionnaire for registry holders	+		
	Customized (by selection) or full (complete list) registry browsing	+		
	Customizable search function (search filters)	+		
	Customizable comparison tool	+		
	Patient registry submission – PARENT editor published	+		
	Access to registry contact details	+		
RoR v2.0	User registration		+	
	User authorization		+	+
	Cross-content and user linking (tagging)			+
	Questionnaire-profile with criteria for quality and interoperability dimensions assessment		+	
	Patient registry submission – user published		+	
	Integrated access to registry guidelines		+	
	Data dictionary access		+	+
	Customizable user profile		+	+
	Customizable registry profile		+	+
	Access to registry Assessment tool		+	+
	Advanced and customized search filters		+	

# Core services (continued)

Component	Service	Available now	Available by the end of 2015	For future developme nt
Assessment tool	Profile completeness assessment		+	
	Registry benchmarking		+	+
	Alignment with PARENT Guidelines		+	+
	Registry quality assessment		+	+
	Registry interoperability readiness assessment		+	+
	Coding sandbox (modular site, reusability assurance)		+	+
	Pilots (EAR)		+	+
Guidelines v1.0 Static		+	+	+
Guidelines v2.0 Wiki			+	+
	Case study (Arthroplasty register)	+		
OpenEHR	Repository of archetypes (clinical models) that can be reused	+		+
	Creation and verification of new archetypes	+		+
•••	Creation of new templates based on archetypes	+		+
OpenEHR server	Implementation of registries (data structures, forms) based on OpenEHR	+		+