



Challenges Faced by Registries

EuReCa

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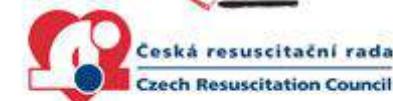
EuReCa

**Jan-Thorsten Gräsner / Ingvild Tjelmeland / Siobhan Masterson /
Johan Herlitz / Rolf Lefering**



The EuReCa Family





Bosnia-
Herzegovina



Emergency Medical
Services Copenhagen

Finland



Greece



Malta



Portugal

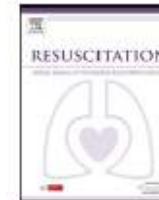


EuReZ-SK



Participating countries not having a registry or logo yet are represented by their country name.

Contents lists available at ScienceDirect

Resuscitationjournal homepage: www.elsevier.com/locate/resuscitation

Clinical paper

Quality management in resuscitation – Towards a European Cardiac Arrest Registry (EuReCa)[☆]J.T. Gräsner^{a,*}, J. Herlitz^b, R.W. Koster^c, F. Rosell-Ortiz^d, L. Stamatakis^e, L. Bossaert^f^aDepartment of Anesthesiology and Intensive Care Medicine, University Hospital Schleswig-Holstein, Schwanenweg 21, 24105 Kiel, Germany^bDivision of Cardiology, Sahlgrenska University Hospital, SE-413 45 Göteborg, Sweden^cafd. Cardiologie, Kamer F3-239, Academisch Medisch Centrum, Meibergdreef 9, 1105 AZ Amsterdam, The Netherlands^dEmpresa Pública de Emergencias (Public Utility for Health Emergencies), Sanitarias, Almería, Spain^eDepartment of Emergency Medicine CHU Tivoli, ULB, La Louvière, Belgium^fUniversity of Antwerp, Faculty of Medicine Universitetsplein 1, B2610 Antwerp, Belgium

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ABSTRACT

Background: Knowledge about the epidemiology of cardiac arrest in Europe is inadequate.**Aim:** To describe the first attempt to build up a Common European Registry of out-of-hospital cardiac arrest, called EuReCa.**Methods:** After approaching key persons in participating countries of the European Resuscitation Council, five countries or areas within countries (Belgium, Germany, Andalusia, North Holland, Sweden) agreed to participate. A standardized questionnaire including 28 items, that identified various aspects of resuscitation, was developed to explore the nature of the regional/national registries. This comprises inclusion criteria, data sources, and core data, as well as technical details of the structure of the databases.**Results:** The participating registers represent a population of 35 million inhabitants in Europe. During 2008, 12,446 cardiac arrests were recorded. The structure as well as the level of complexity varied



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 - Project started by the European Resuscitation Council in 2007
 - Goal: A European wide registry for collecting and analysing data from OHCA in Europe
 - One Headquarter , several satellites
 - Every registry is following / using the Utstein definition
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Low hanging fruits

CARDIAC ARREST IN EUROPE: *the denominator*

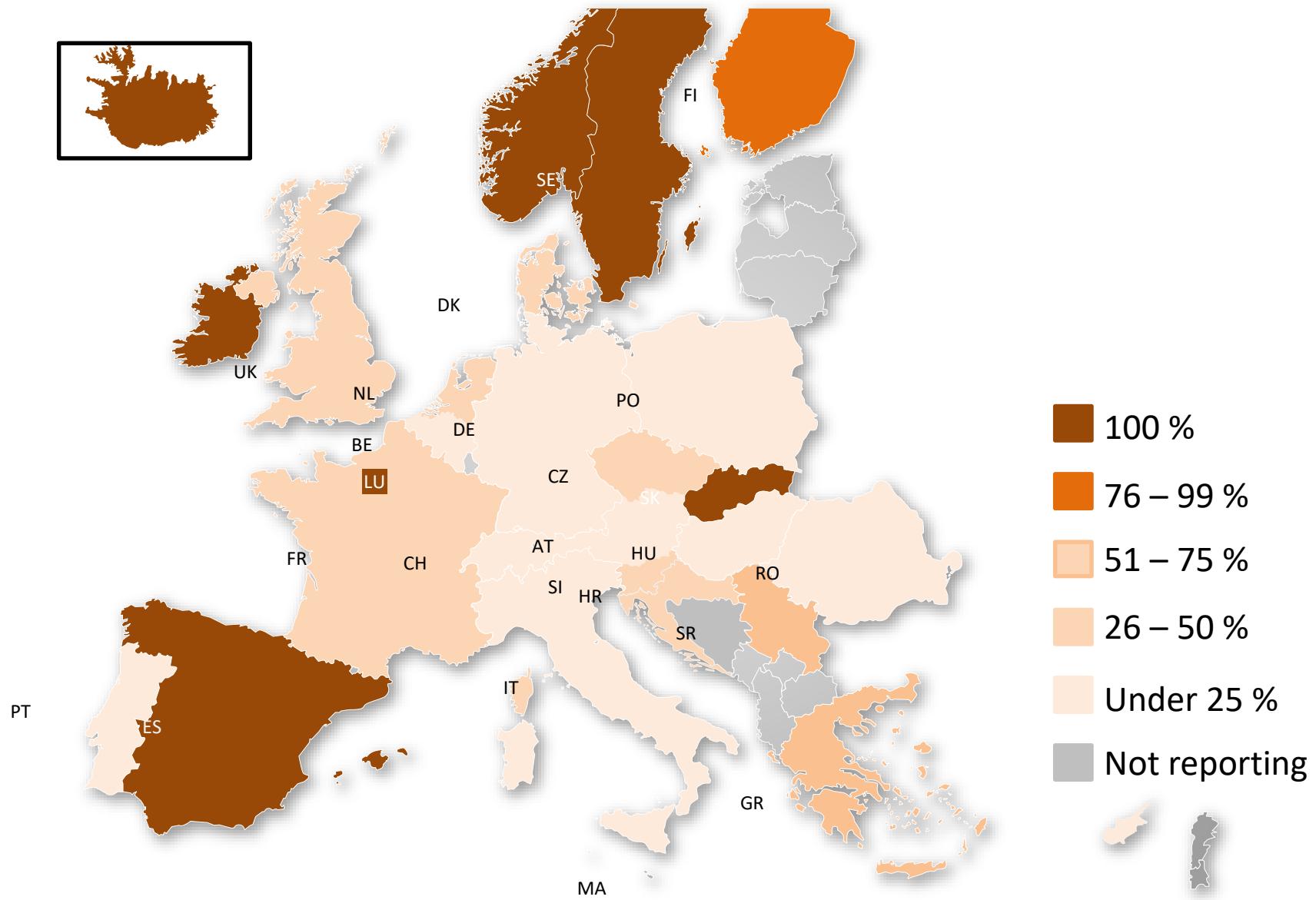
- Europe according to EU 27 countries 499 mil
- Political definition (CE-WHO) 47 (53?) countries 830 mil
- Geographical definition 47 (53?) countries 730 mil



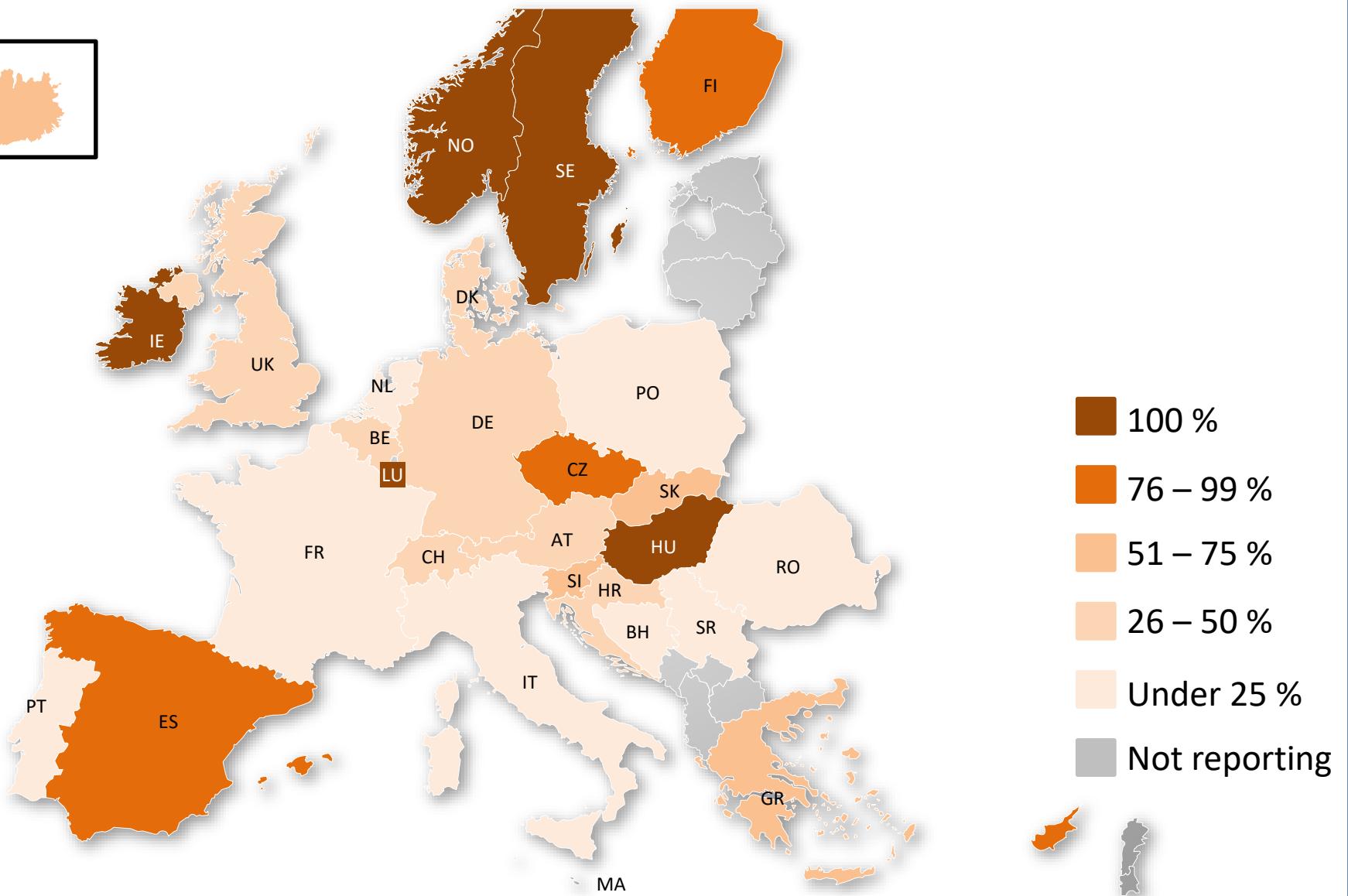
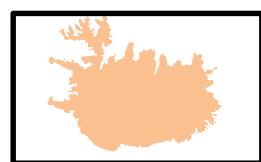




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Population covered for EuReCa ONE



Population covered for EuReCa TWO

Situation in Europe

- 27 (29) existing “registries”
- 100% coverage <-> Hot spots
- Regulated by law <-> voluntary
- 27 (29) different approaches, wishes, goals within every registry
- 27 (29) local/national heroes

Situation in Europe

- 27 (29) different languages
- 27 (29) more or less same definition of the Utstein variables
- 27 (29) different technical systems to collect data
- 27 (29) different organisations and collaborations
- 27 (29) different ways of financing the registry

Situation in Europe

- 1 wish: Collaboration within this group
- 1 goal: Learn from each other
- 1 network: To work together
- 2 European wide studies
 - EuReCa ONE
 - EuReCa TWO



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Clinical paper

EuReCa ONE—27 Nations, ONE Europe, ONE Registry A prospective one month analysis of out-of-hospital cardiac arrest outcomes in 27 countries in Europe[☆]



Jan-Thorsten Gräsner^{a,b,*}, Rolf Lefering^c, Rudolph W. Koster^d, Siobhán Masterson^e,
Bernd W. Böttiger^f, Johan Herlitz^g, Jan Wnent^{a,b}, Ingvild B.M. Tjelmeland^h,
Fernando Rosell Ortizⁱ, Holger Maurer^j, Michael Baubin^k, Pierre Mols^l,
Irzal Hadžibegović^m, Marios Ioannidesⁿ, Roman Škulec^o, Mads Wissenberg^p, Ari Salo^q,
Hervé Hubert^r, Nikolaos I. Nikolaou^s, Gerda Lóczki^t, Hildigunnur Svavarsdóttir^u,
Federico Semeraro^v, Peter J. Wright^w, Carlo Clarens^x, Ruud Pijls^y, Grzegorz Cebula^z,
Vitor Gouveia Correia^{aa}, Diana Cimpoesu^{ab}, Violetta Raffay^{ac}, Stefan Trenkler^{ad},
Andrej Markota^{ae}, Anneli Strömsöe^{af}, Roman Burkart^{ag}, Gavin D. Perkins^{ah},
Leo L. Bossaert^{ai}, on behalf of EuReCa ONE Collaborators¹



10.852

New development in research

EuReCa TWO





191.618.319

These inclusion criteria include all patients who receive resuscitation (chest compression and/or defibrillation of any type)

- By the EMS
- Before the arrival of the EMS with continued resuscitation by the EMS
- Before the arrival of the EMS, that is immediately stopped (for any reason) when the EMS arrives
- Patients who achieve ROSC before the arrival of the EMS



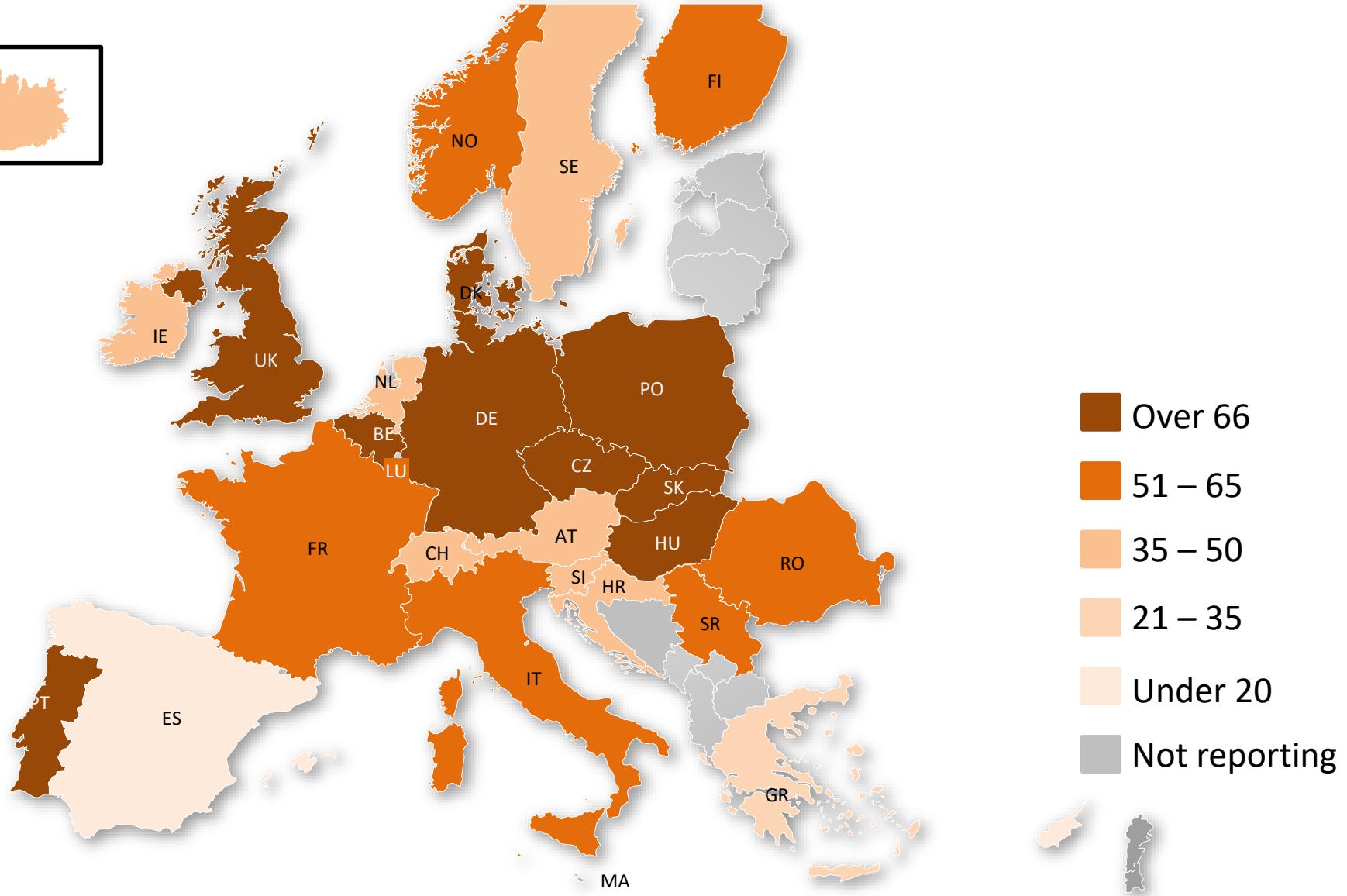
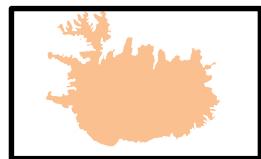
38.585

About the study

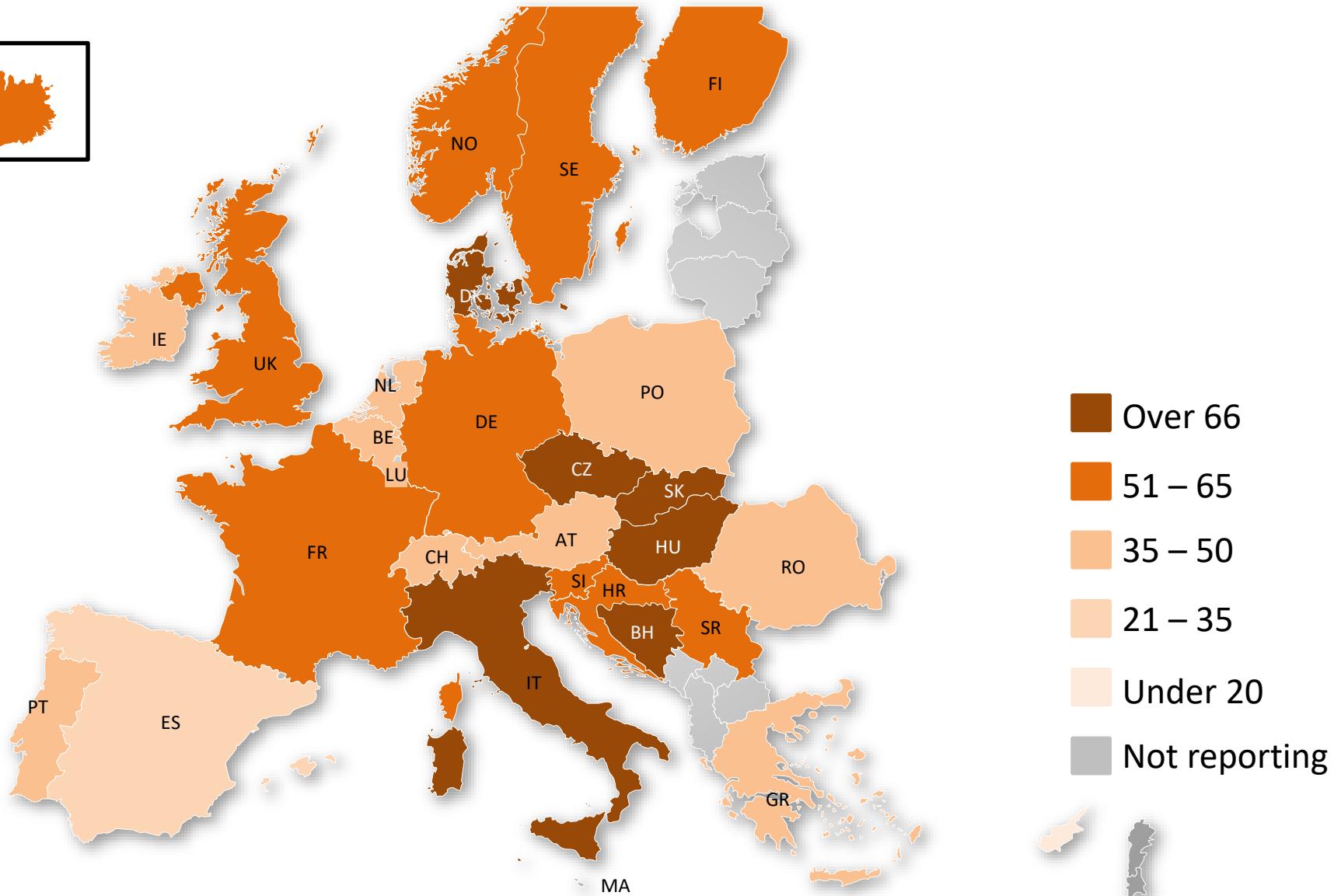
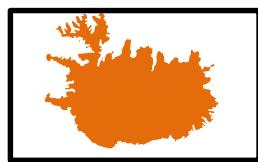
Aims:

- ✓ **Expand the *EuReCa network***
- Find the incidence and outcome for out-of-hospital cardiac arrest (OHCA) in Europe
- Improve the understanding of the role, age, and gender profile of ***bystanders*** in OHCA in Europe
- Generate estimates of European ***OHCA incidence and outcome*** for patient subgroups that make up a small proportion of overall cases at national level e.g. traumatic aetiology, patients transferred to hospital with ongoing CPR.

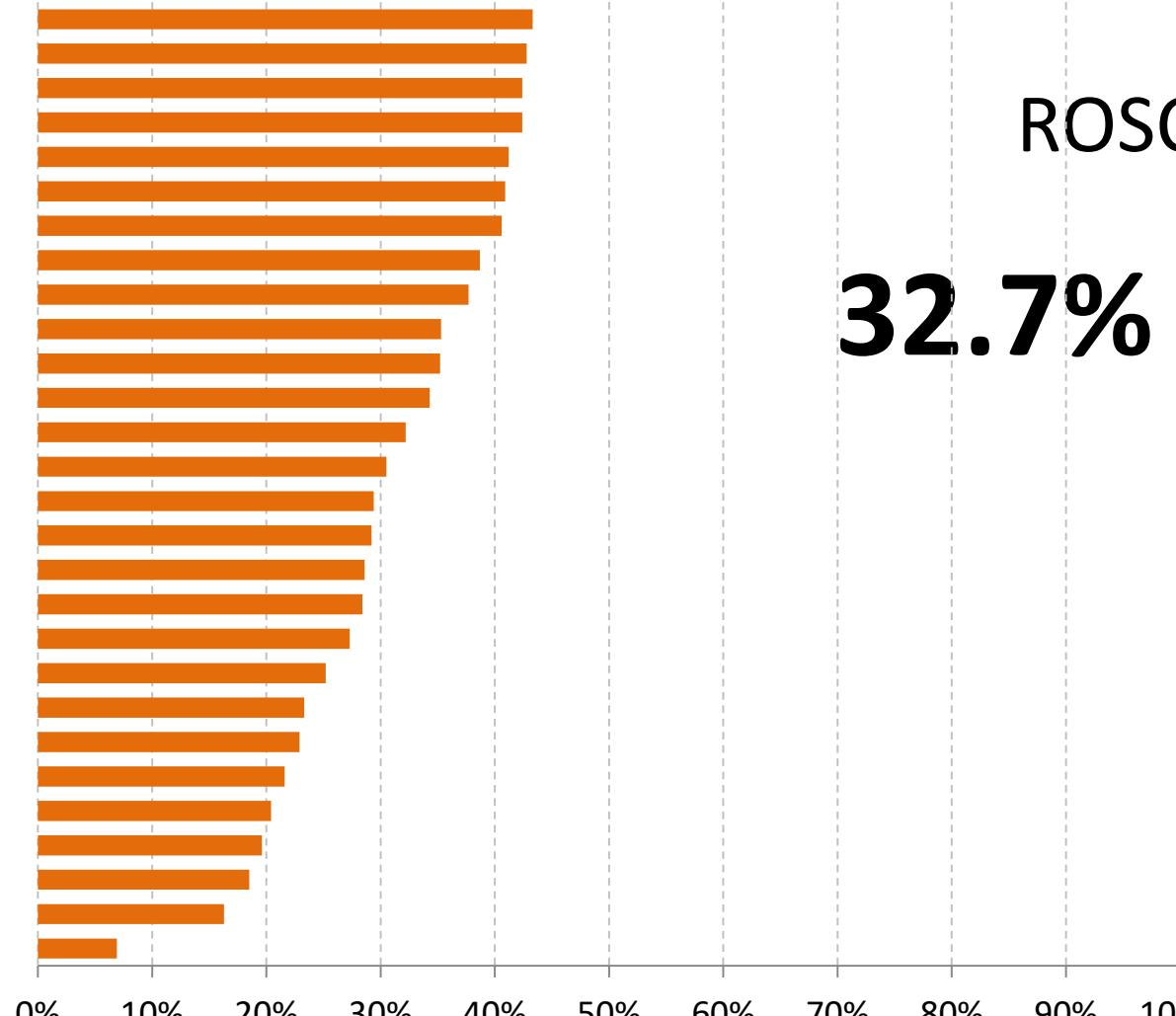
Incidence EuReCa ONE



Incidence EuReCa TWO



- █ Over 66
- █ 51 – 65
- █ 35 – 50
- █ 21 – 35
- █ Under 20
- █ Not reporting



ROSC rate

32.7% overall

n = 25,077

94 cases (0.4%) had missing
data regarding ROSC



ROSC in EuReCa ONE

28.6%

To be discussed

- 27 (29) nation wide data collection in Europe
- Differences
 - In EMS System
 - In Culture
 - In Performance
 - In Documentation



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