

SHARING THE OHDSI JOURNEY AND A VISION OF EVIDENCE TODAY, NOT IN SEVERAL TOMORROWS

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BACKGROUND

Europe is an ocean of data, but a desert for analysis. In response to this, within the Innovative Medicines Initiative (IMI), the publicprivate partnership, EHDEN was created. Running from November 2018 to April 2024 prior to launching startup, it consists of 23 partners, co-led by Erasmus Medical Centre, and Janssen.

EHDEN's mission is to create an open science ecosystem via a federated network of Data Partners with locally mapped datasets to the OMOP common data model (CDM), generating timely and reliable evidence at scale to impact on clinical practice for positive patient outcomes.

EHDEN is industrialising adoption of the OMOP CDM, and utillisation of the OHDSI standardised analytical pipeline, operating across three pillars, (1) Sociotechnical architecture development, (2) Evidence generation, and (3) Value proposition development, sustainability and training/education.

3 PILLARS

SOCIOTECHNICAL

• EHDEN's federated network has grown to 140 Data Partners in 26 countries and 47 certified SMEs in 19 countries. Two final Data Partner calls will be held in 2022, targeting a final 200 or more Data Partners, and a final SME call has resulted in 20 additional SMEs to be certified in a consistent, reproducible and rigorous methodology of ETL to the CDM

- Currently, more than 500 million anonymous health records are being harmonised to the OMOP Common Data Model
- Scheduled for launch at the OHDSI Europe 2022 Symposium, a metadata-driven catalogue of EHDEN Data Partners, with feasibility dashboards is the first module of the EHDEN Portal to support a research workflow across the network
- Incorporation of Data Quality Dashboard work in EHDEN/ OHDSI to enhance the ETL process and granular understanding of its fidelity

EVIDENCE GENERATION

- EHDEN has contributed to more than 50 publications since launch, as outputs of our evidence generation programme via use cases, study-a-thons, and evidence-a-thons in diverse therapeutic areas
- The programme has collaborated in study-a-thons in osteo, and rheumatoid arthritis, COVID-19 (with OHDSI), and prostate cancer (with IMI_PIONEER and OHDSI), planning

further in the remainder of the IMI programme

- Evidence-a-thon ('e-thon's) programme to support Data Partners with newly mapped datasets to start their training via re-running studies and on standardised analytical pipeline is growing
- Use cases to develop methods on Health Technology Assessment, outcome standards, and prediction/federated learning are being developed further with publications expanding

SUSTAINABILITY & EDUCATION

- Ongoing work on stakeholder value propositions has supported operational and business planning for sustainability
- A not-for-profit legal entity established under Dutch law in late 2021 to transition to a post-IMI startup in 2024
- Our SME partners are working with their own customer bases

Figure 1: Geographical overview of EHDEN Data Partners mapping to the OMOP CDM

on mapping to the OMOP CDM, as well as interacting with the wider OHDSI community and workgroups on tools, skills and methods developments

 The free EHDEN Academy is now being used in >60 countries worldwide with >2,000 colleagues, with a growing curriculum of learning pathways and courses around ETL, tools, skills & methods, as well as for the lay public, in HTA or Regulatory developing. Educational metrics evaluation is being initiated

CONCLUSION

European Health Data Space (EHDS)

national nodes and the global network

programmes

EHDEN is impacting and delivering now, and not at the end of the IMI programme. A key indicator of success will be the plurality of support for clinical, regulatory, health technology assessment and outcomes decision-making. It is imperative for EHDEN to succeed in supporting the evolution of European healthcare, as well as collaborating with OHDSI in Europe and internationally for a global, open science community.

WHAT IS NEXT FOR EHDEN

• The programme will conclude its Data Partner calls and aims to

be working with ~200 Data Partners and ~750 million health

records interoperable via the CDM with the global OHDSI

• A transitional phase to the not-for-profit legal entity as a

European Coordination Centre supporting the operating model

that facilitates an open science community and evidence

generation at scale with rapid analysis through to research

Provision of sustainable architecture used by EHDEN and

OHDSI across the research workflow under FAIR principles, and

similar to that being developed or envisaged in Europe, such as

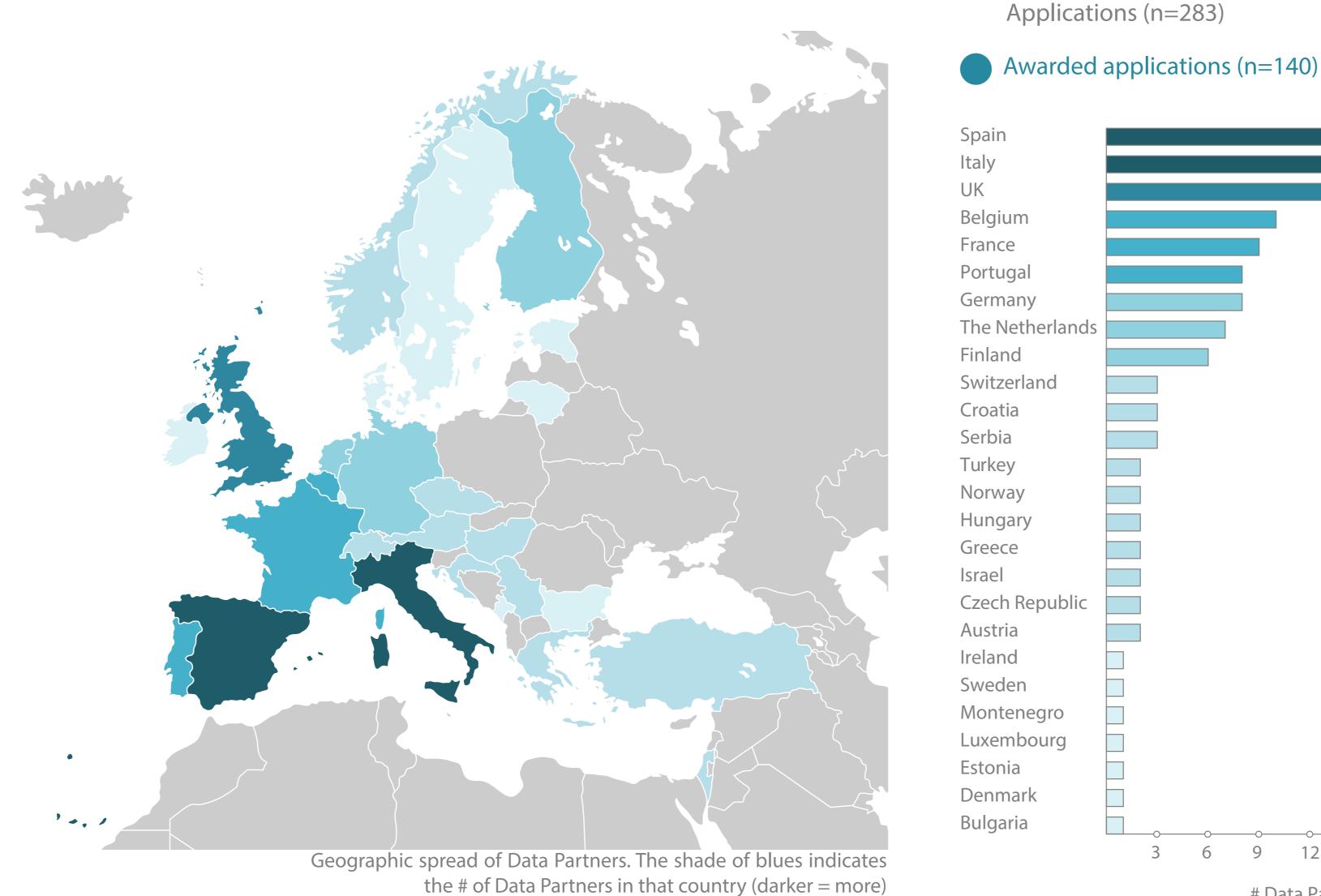
the European Medicine's Agency's DARWIN EU network, and the

Ultimately a self-actualised and self-sustaining European open

science community at scale, embedded within OHDSI Europe,

network, with ~67 SMEs, all in ~30 countries

The project looks forward to greening the European analysis desert and transforming it into a flourishing garden for rapid decision-making.



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Scan QR for more information about EHDEN can be found at: www.ehden.eu



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