QUANTUM project kicks off to develop and implement the health data quality label for the secondary use of health data in the EU.

On 20 and 21 February, the consortium for QUANTUM: "Developing a Data Quality and Utility Label" met in Brussels for the kick-off meeting to officially launch the Horizon Europe-funded project. All the partners discussed the various activities and highlighted the way forward for this ambitious and strategic project to unlock the full potential of new tools, technologies and digital solutions for a data-driven healthy society.

Over the next three years (2024 -2026), the QUANTUM project aims to develop and implement the health data quality label for the secondary use of health data in the EU.

QUANTUM's objective is to create a common label system for Europe that will allow its use in all countries for scientific and health innovation purposes. These labels will enable researchers to use data with a notion of the quality and utility that will ensure that their research and innovations are effective and provide value to society.

The project will be **testing a labelling mechanism** across health data holders (such as healthcare organisations, health institutions and bodies, and research entities of the healthcare sector), to create value not only for them but also for data users and Health Data Access Bodies (HDABs) within the European Health Data Space (HealthData@EU).

To reach its objectives, QUANTUM will also be working for **exchanges and synergies with currently existing EU initiatives** on the secondary use of health data, including TEHDAS, TEHDAS2, HealthData@EU Pilot, EHDS2 capacity building, Genomic Data Infrastructure (GDI), DARWIN EU, EDHEN, among others.

Article 56 of the European Health Data Space Regulation

Article 56 of the European Health Data Space Regulation proposal mandates labelling health datasets within the EU to show their quality and usefulness. This initiative promotes transparency and trust in health data sharing across the EU for secondary purposes, benefiting research, innovation and healthcare systems as a whole. The QUANTUM project supports these goals, by **creating a user-friendly labelling system for health datasets**, ensuring they meet EU quality standards and making data assessment easier for holders and users. Our goal is to ensure that the HealthData@EU benefits primary users such as researchers and innovators, by providing them high-quality data. Using this data for research and innovation will bring the best outcomes for final beneficiaries.

QUANTUM's objectives:

Conceptualise and develop a data quality and utility label in the context of a data holder maturity model

QUANTUM is dedicated to developing and enhancing a universal labelling mechanism for health data holders, allowing them to assign quality and utility labels to datasets under the guidance of HDABs. This initiative will drive improvements in data management practices in the healthcare sector.

Design, develop, and test the labelling of the data sets' quality and utility, and data holders' maturity.

QUANTUM aims to establish EU-harmonized technical specifications for assessing both the quality and utility of datasets, alongside the maturity level of health data holders. By providing a standardized specification, QUANTUM will enable researchers and innovators. to consistently evaluate and compare data quality and maturity across various contexts, ultimately fostering better biomedical research and innovation.

Analyse implementation challenges to ensure the labelling process is transferable and sustainable as part of HealthData@EU

The QUANTUM labelling system is designed to streamline the process of publishing datasets following the standards set forth by HealthData@EU's article 56. By adhering to these

standards, QUANTUM ensures that datasets are easily discovered, thereby promoting and facilitating cross-national research and innovation.

Develop a capacity-building program that allows a broad engagement of the data quality professional community, patients and citizens

The capacity-building program for the QUANTUM project aims to engage a wide range of stakeholders, including data quality professionals, patients, and citizens. The program will focus on providing training, resources, and opportunities for collaboration to enhance understanding and participation in the implementation and adequate use of the data quality label.

QUANTUM's consortium:

Bringing together 35 participants including the major European research infrastructures and the European digital industry, the QUANTUM consortium gathers various expertise essential for the project's success. With the Aragon Institute of Health Sciences (IACS) as coordinator, the project unites the following participating countries: Spain, Belgium, France, Italy, Austria, the Netherlands, Croatia, Finland, Ireland, Greece, Norway, Germany, United Kingdom, Portugal and Slovenia.

For the full list of participants and affiliated partners please consult the QUANTUM's Cordis webpage.

Follow QUANTUM on LinkedIn and Twitter. For general information about the project, write to info@quantumproject.eu