## **RE-SAMPLE**



REAL-TIME DATA MONITORING FOR SHARED, ADAPTIVE, MULTI-DOMAIN AND PERSONALISED PREDICTION AND DECISION MAKING FOR LONG-TERM PULMONARY CARE ECOSYSTEMS



## WHY

**Chronic Obstructive Pulmonary Disease** (**COPD**) is a common, progressive lung condition with a high impact on quality of life and life expectancy.

Many patients with COPD have **multiple chronic conditions**, like diabetes, cardiovascular diseases or mental health issues. The care of patients with COPD and co-morbid chronic conditions is very complex. There are overlapping risk factors and symptoms which can delay appropriate treatment, and multiple healthcare professionals are involved.

The challenge of the increasing number of patients with COPD and multi-morbid chronic conditions requires an integrated, personalised, approach to support and manage care for these patients.

## WHAT

Over the course of four years (2021-2025), RE-SAMPLE will work to transform the healthcare journey of patients with other chronic conditions. We will use **Real World Data (RWD)** to:

- monitor symptoms beyond scheduled medical check-ups;
- give doctors, caregivers, and patients a unique insight into common, day-today triggers that can lead to health complications; and
- support personalised treatment and develop a virtual companionship programme.

Our aim is that **RE-SAMPLE's approach** to integrated care will help prevent disease progression and empower patients to manage their care.

## HOW

As a multidisciplinary consortium, RE-SAMPLE will gain unique insights into the relationships between patients' clinical and non-clinical characteristics and how these impact disease progression, using RWD monitoring and **Artificial Intelligence**.

The data will serve predictive models that could help patients and their doctors make treatment and lifestyle changes in time. To ensure that we can gather quality data and that our system truly fits the needs of patients, we will rely on inclusive design and a **citizen science** approach.

One of our project's hallmarks is the early integration of security and privacy settings across all technical (the system itself will be designed from this perspective) and nontechnical (the project will adhere to rigorous ethical and data protection standards) aspects of RE-SAMPLE.













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