



RE-SAMPLE has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement no 965315.



Newsletter N.6, May 2023

Dear reader,

For this sixth edition, the RE-SAMPLE project is moving forward. This month we will continue the presentations of our consortium members and of our PhD students! You will also join us on different events that happened in the last months!

FONDAZIONE POLICLINICO UNIVERSITARIO AGOSTINO GEMELLI IRCCS (GEM)



Founded in 1964, [Fondazione Policlinico Universitario Agostino Gemelli IRCCS](#) (FPG) is an academic medical centre operating in all areas of health and clinical assistance and one of the most

As part of the RE-SAMPLE project, FPG's multidisciplinary team is providing expertise on AI/Machine learning using real-world evidence, including expertise in managing hospital-available patient data, according to GDPR rules and with full respect for data integrity and intellectual property.

The trial uses electronic health records

important and internationally acclaimed care providers in Italy.

FPG provides healthcare to approximately 95,000 Inpatients and 250,000 outpatients per year and, in the framework of the Catholic University School of Medicine, trains doctors.

Its operational model aims at integrating care processes and the hospital's activities, which are currently managed by 8 Departments and 139 Operational Units. In 2018 FPG has obtained from the Italian Ministry of Health the status of IRCCS (Istituto di Ricovero e Cura a Carattere Scientifico), a status granted to Excellency hospitals committed to healthcare and research.

Collaborating on the RE-SAMPLE project are the [Pneumology Operating Unit](#), directed by Prof. Luca Richeldi, and the Gemelli Generator Real World Data Research Facility, directed by Prof. Vincenzo Valentini.

The [Gemelli Generator Real World Data](#) offers services to extract, analyse and process large data volumes through advanced Artificial Intelligence and machine learning techniques.

(EHRs) and wearable devices to collect data on COPD patients' vital signs, symptoms, and healthcare encounters. This data is then analyzed and used to develop predictive models that can identify patients at high risk of exacerbation.

The study's contribution from the Gemelli Hospital is significant. The pulmonology unit through patient enrollment, provided the necessary data for the development of machine learning models, including data related to the clinical history of patients to socio- characteristics and the results of laboratory and diagnostic evaluations.

The hospital is one of the trial's partner institutions, and its clinicians and researchers are actively involved in the study's design, implementation, and analysis. Gemelli Hospital's experience in treating COPD patients and its use of advanced medical technologies made it an ideal partner for the study.

The hospital's involvement in the resample trial is part of its broader commitment to improving patient outcomes through innovative medical research and clinical practices. Through its participation in the trial, the hospital hopes to contribute to the development of new tools and approaches for managing COPD and other respiratory diseases. Ultimately, this work has the potential to benefit patients not only in Italy but around the world.

RE-SAMPLE met in Rome!



On 21 and 22 March 2023, the RE-SAMPLE Consortium met again, this time in Rome, Italy!

We started by looking back on the project's achievements and on the challenges ahead of us!

The time on the first day was divided between several workshops and discussions on coaching, interventions, the clinical dashboard as well as the integrated care protocol and the service model.

Our Gemelli partners also surprised the consortium by inviting two patients involved in the project who gave great insights during the session on patient perspectives.

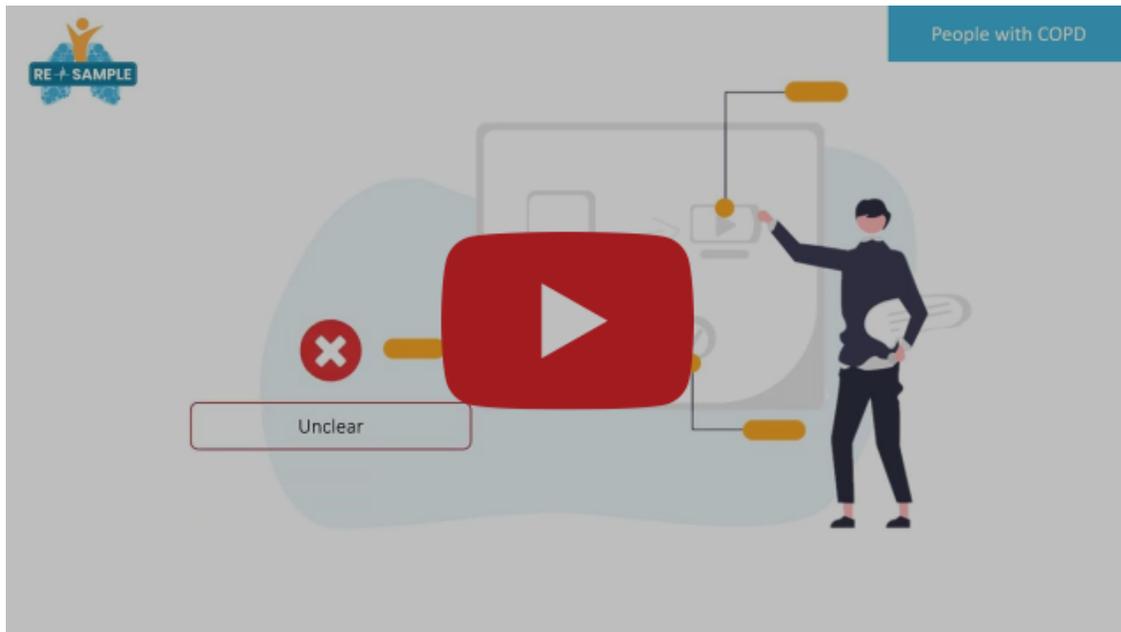
The second day started with the scientific coordination and a new discussion organised for PhD students: RE-SAMPLE had its first doctoral consortium! Two very interesting sessions happened in parallel, where the PhD students involved in the project shared their advancements, raised some questions and asked for feedback.

The rest of the day continued with an important discussion on privacy policy and risk analysis. The following sessions focused on discussing phenotyping and models, the lessons learnt on the edgenodes and on having an overview of the platform prototype!

All the partners headed back home with good insights on the work to be done... and great t-shirts celebrating the milestone of 100 patients recruited for the project!

The full consortium will now meet again in the autumn.

RE-SAMPLE End-user Walkthrough Summary Video



The video was produced by RE-SAMPLE partner Roessingh Research & Development and gives feedback on the end-user walkthrough.

PhD corner

Meet our PhD students: Roswita Vaseur



Hello there! My name is Roswita Vaseur. I was born and raised in Suriname, a small country in South America where the official language is Dutch. After completing high school in Suriname, I moved to the

Shared decision making (SDM) is a collaborative process between the patient and healthcare professional to decide on a treatment strategy (e.g. personalized coaching), where amongst other things patient values, preferences and scientific evidence are taken into account. As SDM is not yet common practice, it is very useful that RE-SAMPLE conducts research on this topic. We expect that involving patients actively in setting up a treatment plan will lead to more successful treatments, and more treatment adherence.

In the first phase of my PhD project, I am mainly busy in the office behind my laptop, but I also supervise bachelor and master

Netherlands to study Biomedical Engineering. Since May 2021, I work as a PhD-student at the University of Twente (UT) in the Netherlands, which is coordinating the RE-SAMPLE project.

As you may already know, the RE-SAMPLE project aims to identify possible predictors of disease progression and exacerbations of chronic obstructive pulmonary disease (COPD) and other chronic diseases through the collection of real-world data. But did you know that we also conduct research into personalized coaching and shared decision making for this patient group? My PhD project mainly focuses on this.

students. Now and then I get the opportunity to do studies with healthcare professionals which gives me a lot of insight on how they view SDM. I look forward to the next phase for doing studies with patients as well, to gain more insight in their perspective on SDM. Their input is also very useful to us, so that we can hopefully support them as much as possible in facilitating SDM with the use of technology.

Girlsday 2023



On 30 March 2023, Eline te Braake and Roswita Vaseur, two of RE-SAMPLE PhD students, participated in the Girls' Day organised by the University of Twente.

During this event, technical companies, (non-)governmental organisations, and research institutes opened their doors for 10-15 year old girls, in order to awaken/increase their interest in science,

This year, the University of Twente hosted 3 groups of girls between the age 12-13, from three different high schools - Greijdanus Zwolle, Lyceum de Grundel, and Montessori College Twente.

In a fun way, Eline and Roswita introduced the RE-SAMPLE project and e-Health technology to a group of 25-30 girls. In smaller groups, the girls designed their own e-Health technology on paper. One group, for example, designed a mobile application connected to a smart-watch for a fictional 71- year old grandfather who wants to be more physically active.

Eline and Roswita were very impressed by all the different designs and excitement for

technology, engineering and mathematics (STEM).

e-Health technology. They were happy they got to inspire these girls!

This event was a good way to promote diversity, equity and inclusion in science!

Publications

Balancing data-hungriness of AI and the workload of manual data collection

In 2022, Christiane Grünloh, Eline te Braake, Marian Hurmuz and Stephanie Jansen-Kosterink from our partner Roessingh Research and Development participated in a workshop at the ECSCW conference. The volume 19 issue 2 of the international reports on socio-informatics is a report on this workshop entitled "Exploring Human-Centered AI in Healthcare".

The paper published is entitled "Balancing data-hungriness of AI and the workload of manual data collection".

The abstract is available on the right.

"Artificial intelligence systems need big data sets for the development of models or machine learning algorithms. This data has to be collected, which is not always possible to do automatically. Manual data collection in healthcare is often performed by patients or their caregivers, which adds workload to their existing disease burden. This paper reports on a qualitative study with Dutch patients and healthcare professionals focusing on data collection on patients living with chronic obstructive pulmonary disease. Both groups were concerned about the response burden of patients filling in questionnaires on a daily basis, who have limited energy at their disposal, to begin with."

[Link to publication](#)

Events to come



[Health by Tech.](#)

1 and 2 June 2023, Enschede, the Netherlands

[ERS International Congress 2023](#)

MiCo in Milan, Italy from 9 – 13 September, 2023



ERS EUROPEAN
RESPIRATORY
SOCIETY
every breath counts

Do you want to know more about RE-SAMPLE activities?

[Click here!](#)



Sign up to receive our newsletter!

Stay in touch with RE-SAMPLE project's progresses and results by subscribing to our newsletter sent out every two months. You can unsubscribe at any moment.

Subscribe



Disclaimer: The information contained in this Newsletter is for information purposes only. The content of this Newsletter does not reflect the official opinion of the European Union. Responsibility for the information and views expressed lies entirely with the authors.

This email was sent to <<Email Address>>

[why did I get this?](#) [unsubscribe from this list](#) [update subscription preferences](#)

RE-SAMPLE · Avenue Marnix 30 · Bruxelles 1000 · Belgium

