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Strengthening Cardiovascular Care Resilience for Healthier Hearts: The RESIL-Card Project

Prompted by concerns over the substantial disruptions in cardiovascular care during the COVID-19 pandemic, a team of interventional cardiologists has joined forces with public health and healthcare delivery experts to launch the EU-co-funded RESIL-Card project, which aims to develop a toolkit for resilience assessment to improve preparedness and continuity of cardiovascular care during times of crises.



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key points

- Disruptions in care delivery for patients with cardiovascular diseases during the COVID-19 pandemic, including a decline in the number of life-saving procedures performed, came at a considerable health and societal cost and demonstrated the unpreparedness of healthcare services to maintain care delivery during crises.
- A team of international interventional cardiologists from the We CARE initiative has formed a consortium with public health and healthcare delivery experts to launch the EU-co-funded RESIL-Card project.
- Drawing on insights and lessons learned from the pandemic, this three-year project aims to develop and implement a groundbreaking resilience assessment toolkit to support healthcare systems to self-assess and improve their preparedness, working towards ensuring cardiovascular care continuity for all patients in challenging times.

Cardiovascular diseases (CVD) are leading causes of death and morbidity globally. The devastating consequences of disrupted cardiovascular care were highlighted during the COVID-19 pandemic, where a substantial decline in the number of life-saving interventions performed was observed, such as procedures to treat acute myocardial infarction and stenotic aortic valves (Roffi et al. 2020). This reduction in the number of procedures is likely to have increased out-of-hospital deaths and long-term complications (e.g. heart failure progression) (Mafham et al. 2020) while also having a considerable economic impact (Lunardi et al. 2024). As an example, it is predicted that patients who experienced an ST-elevation myocardial infarction during the first lockdown in Spain lost an average of 2 life-years compared with patients presenting

during the pre-pandemic period, with an estimated societal cost burden of €89 million (Lunardi et al. 2024).

Prompted by concerns over the disruption of cardiovascular care continuity, PCR, an organisation dedicated to education and information in cardiovascular interventional medicine, joined with the global 'Stent—Save a Life!' initiative to launch 'We CARE' in May 2021 ([We CARE 2024](#)). Led by a network of international interventional cardiologists, nurses, and allied professionals, We CARE's remit is to support all stakeholders in the CVD field in delivering effective and timely cardiovascular care sustainably, whatever the circumstances.

The pandemic demonstrated the unpreparedness of healthcare services, and thus, a key aim of We CARE is to learn

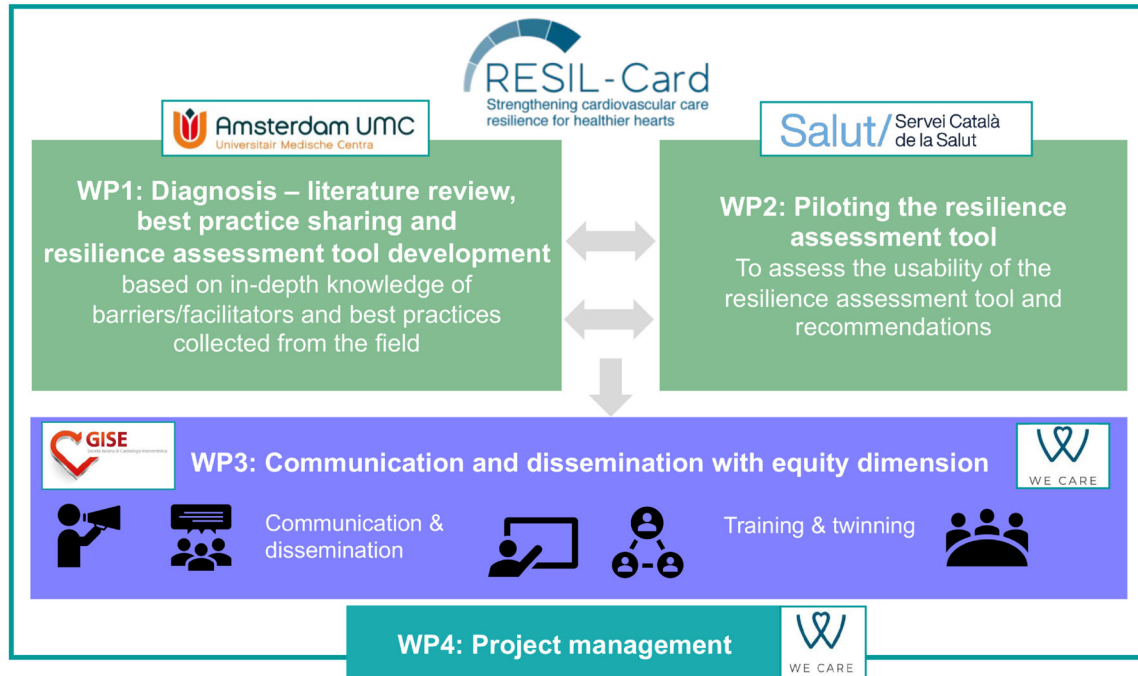


Figure 1: Four complementary work packages (WP) are integrated into the [RESIL-Card project](#)

important lessons and help to build more resilient healthcare systems that can withstand future challenging situations. We CARE, in partnership with the Italian Society of Interventional Cardiology, GISE, with public health experts from Amsterdam UMC and with the Catalan Health Service, CatSalut, formed a consortium and launched the [RESIL-Card](#) project in December 2023. Co-funded by the

EU4Health programme, the 3-year RESIL-Card project aims to develop and implement a groundbreaking resilience assessment toolkit to be applied to European cardiovascular care systems. This toolkit intends to support stakeholders in assessing the preparedness and resilience of their cardiovascular care pathways and identifying and addressing gaps using recommended standards.

The main objectives of RESIL-Card are to:

- Identify and document major gaps/barriers, good practices and lessons learned from the COVID-19 pandemic regarding CVD care efficiency and resilience in times of crisis.
- Develop a resilience assessment toolkit to support local and regional processes and minimum requirements for resilience.
- Make recommendations and contribute to guideline development for improved care pathways to enhance communication between all patient care levels and between healthcare professionals, patients and their families.
- Empower EU Member States and policymakers to provide patients and healthcare systems with protocols, monitoring tools and awareness engines that ensure actionable measures in a variety of scenarios.
- Mobilise and engage all relevant stakeholders in piloting a set of recommendations across sites where pandemic preparedness levels differ.
- Reduce inequalities with respect to awareness, accessibility and inclusion in care pathways by integrating underrepresented and marginalised social groups.

The project is supported by the expertise of Ireland’s National Institute for Prevention and Cardiovascular Health, Italy’s Cittadinanzattiva, the Global Heart Hub and Europa Group. In addition,

an Advisory Board has been formed, made up of members of the international Women as One group, the European Association of Percutaneous Cardiovascular Intervention's Nurses and Allied Professionals Committee, the GISE Foundation, as well as leading interventional cardiologists from Ukraine.

RESIL-Card comprises four interlinking work packages (Figure 1). The first work package, led by Amsterdam UMC, involves developing the resilience assessment tool using a bottom-up approach. Development will be based on diagnosis of continuity of care issues, encompassing a scoping literature review, large-scale surveys of healthcare professionals and the feedback of focus groups, with multiple stakeholders involved in discussing key barriers/facilitators and best clinical practices. The tool will focus on monitoring and strengthening the continuity of care delivery, aiming for better-integrated care systems and consolidating insights from the pandemic, for example, the use of innovations such

as telemedicine, always with the patient in the central role.

In the second work package, the resilience assessment tool will be pilot-tested by cardiovascular healthcare professionals and institutions from Spain (Catalonia) and Italy. Leading this phase, CatSalut will initially define a set of performance indicators to enable assessment of the tool's applicability and usability. After first-stage pilot testing, in-depth feedback will be collected from the users, with the aim to adapt and refine the tool before its official launch.

Co-leading the third work package – the communication and dissemination strategy – GISE and We CARE will encourage widespread adoption of the tool and recommended standards among the interventional cardiology community thanks to their respective networks. A national twinning approach will be used to foster broad implementation. Efforts will also include engaging with patient organisations to develop communication materials aimed at improving awareness and health literacy among patients and the

public. Workshops will be held with non-governmental organisations, and collaborations will be enhanced with the European Joint Action on Cardiovascular Diseases and Diabetes.

Across all these activities, We CARE will oversee project coordination, work with the Advisory Board, and manage finances, data, publications, and ethics assessments.

The conception and launch of the RESIL-Card project demonstrate a commitment from all the partners involved to help shape European healthcare systems, ensuring they are resilient, patient-centred, and capable of reducing care access inequalities, particularly in challenging times. Through collaboration, innovation and a commitment to excellence, the project aims to future-proof cardiovascular care across the continent.

Conflict of Interest

None.

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