

## COMMENTARY

# Tackling the challenge of cardiovascular diseases and diabetes across Europe: a joint action by more than 300 public health professionals

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### Abstract

Cardiovascular diseases (CVD) and diabetes pose significant health challenges in Europe, affecting millions and burdening healthcare systems. The recent EU4Health Programme places reducing the burden of non-communicable diseases (NCD) at the forefront, through a Joint Action focused on CVD and diabetes (JACARDI, Joint Action on CARdiovascular diseases and DIabetes). This initiative unites 21 European countries, including Ukraine, and over 300 experts. Employing an innovative approach and standardised methodology, JACARDI implements 142 pilot projects covering the entire “patient” journey. Particular focus will be given to improvement of data availability and quality. Additionally, JACARDI will emphasise transversal and intersectional aspects, such as health equity, determinants of health, and social, cultural, and ethnic diversity, while pioneering gender-transformative leadership. Committed to evidence-based interventions, JACARDI aims to harmonise strategies and disseminate knowledge for enhanced CVD and diabetes prevention and management. The goal is to identify effective strategies for wider implementation, fostering cross-national collaboration and fortifying Europe's health resilience.

### Key words

- cardiovascular disease
- diabetes
- public health
- EU4health

## INTRODUCTION

Cardiovascular diseases (CVD) claim millions of lives prematurely on a global scale each year [1]. Within the European Union (EU) almost 63 million people live with CVD, positioning it also as the first cause of death in the region [2]. Simultaneously, diabetes remains a significant public health concern, with the prevalence increased worldwide, and the number of adults with diabetes almost doubled over the last decade in Europe, reaching 32.3 million in 2019 [3, 4]. CVD and diabetes undermine people's health and well-being, and the sustainability of healthcare systems globally and across EU. These chronic conditions have extensive and profound implications, affecting the broader social and economic landscape. CVD and diabetes place a substantial burden on patients, their families, and informal caregivers, affecting people's autonomy in everyday activities and limiting their ability to fully participate in daily work, resulting in productivity losses and undermining economic and societal development [5].

Tackling the substantial global challenge of CVD and diabetes requires a unified and comprehensive response across Europe. This demands an inclusive approach spanning the entire healthcare system and lifespan, aligned with a "health in all policies" framework. European public health requires strong political backing to restructure care pathways, emphasizing integrated services, prevention measures, digitalization, and enhanced patient experiences and outcomes. The recent EU4Health Programme [6] places reducing the burden of non-communicable diseases (NCD) at the forefront, employing a combination of policy initiatives, research, and concrete interventions to bolster health promotion and NCD management.

## ADDED VALUES OF JACARDI

In alignment with this overarching goal, a Joint Action of European Union Member States (MS) focused on the prevention and management of CVD and diabetes was launched to bridge the gaps and further strengthening the collective efforts on these conditions at a European level. The Joint Action on CVD and diabetes, named JACARDI (Joint Action on CARDiovascular diseases and Diabetes), started in November 2023, with the objective of enhancing the implementation of evidence-based interventions, harmonising strategies, and fostering the dissemination of knowledge and resources, through collaborative endeavours and shared best practices across MS. In doing so, it plays a pivotal role in promoting a more equitable and effective approach to CVD and diabetes prevention and management across the EU.

JACARDI brings together 21 European countries, including Ukraine, and more than 300 public health experts from 76 institutions, to enhance and promote the implementation of (cross-sectional) best practices, and pilot testing of innovative practices in MS. Several key aspects of JACARDI will make it a unique project in the European scenario and internationally.

First, 142 pilot actions are planned in 18 European countries. JACARDI focus is not confined to a single aspect of CVD and diabetes care; rather, it encompasses

the whole "patient" journey (*Figure 1*). The latter starts from improving health literacy and increasing awareness of CVD and diabetes to reach general and target populations. It progresses through primary prevention and screening of CVD and diabetes among high-risk populations. It then advances to address patients and their care providers, through improved service pathways and (self-)management, which includes the integration of digital tools. The journey concludes by supporting inclusions maintenance and participation in employment sector of people with these disorders taken as case model for all NCD. Additionally, it transversally covers the improvement of data availability and quality. By implementing these pilot actions, JACARDI is expected to reach and improve the "patient" journey health and well-being of millions of individuals in Europe.

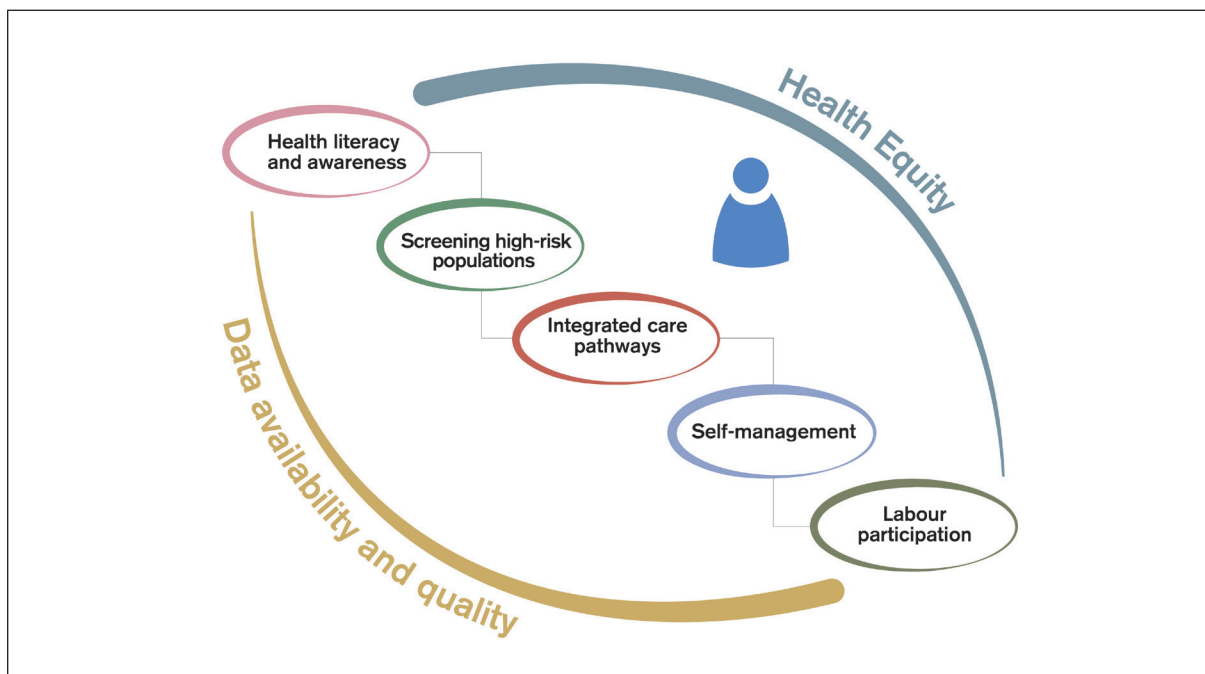
Second, JACARDI targets the uneven distribution of CVD and diabetes, by prioritizing transversal and intersectoral aspects such as health equity, determinants of health, and social, cultural, and ethnic diversity in the pilots' actions. The pilots will receive support in understanding and addressing the underlying mechanisms of inequalities by an explanatory framework to identify key social dimensions of inequalities in CVD and diabetes, covering exposure to risk factors, limitations in care access, and social consequences of these conditions.

Third, JACARDI pioneers gender-transformative leadership, driving positive community change with vision, empathy, and strategic thinking. This approach advocates gender equity in public health leadership, addressing systemic barriers hindering women's advancement [7]. It emphasizes deep-rooted change, recognizes leadership across public health, and shatters gender stereotypes to enable women's leadership, without conforming to patriarchal norms [7]. By nurturing female role models and mentors, JACARDI sets a new leadership paradigm, where this collaborative model transcends competition, emphasizing diverse perspectives, collective efforts, and inclusive governance. JACARDI's legacy lies in empowering the next generation, leaving healthier communities through effective public health solutions.

Fourth, the commitment and active involvement of Ukraine's Ministry of Health's Public Health Center in JACARDI are noteworthy. The ongoing conflict that emerged in February 2022 has undeniably posed significant challenges to Ukraine's healthcare system. This is particularly critical in a country where NCD contribute to 91% of total deaths [8]. JACARDI presents an opportunity for Ukraine to implement pilots benefiting between 500 and 2,500 people, focusing on health literacy among patients, and personal/individual level screening and risk assessment.

## CONCLUSIONS

The roadmaps resulting from JACARDI pilot implementation will facilitate the scale-up of good practices defined by JACARDI at a regional/national level or their replication in other EU countries. The widespread implementation of 142 pilots across 18 European countries ensures comprehensive action and geographical coverage. Additionally, the employment of a



**Figure 1**

“Patient” journey: addressing healthy individuals and those at risk of developing CVD/DM, progressing to individuals diagnosed with CVD/DM at risk of disease progress and multimorbidity. This encompasses both individual and population levels, within different settings.

CVD: cardiovascular disease; DM: diabetes mellitus.

standardised methodology for the implementation and assessment of pilots supports the adoption and adaptation of pilot experiences and successful strategies in larger settings or contexts throughout the EU.

JACARDI unites over 300 public health experts from all over Europe and beyond, sharing a common vision: to jointly tackle the pervasive burden of CVD and diabetes. They actively advocate for and promote the outlined priorities, all in pursuit of attaining the utmost level of health and well-being for both individuals and society as a whole. Furthermore, they strive to construct a more sustainable, resilient, and equitable public health framework, reflecting their dedication to enhancing the health for all in Europe.

#### **Authors' contributions**

BA, BF, and GO conceptualised and drafted the Commentary. All Authors contributed to reviewing and finalising the Commentary. All Authors approved the final version of the manuscript.

#### **Conflict of interest statement**

The Authors declare that there are no conflicts of interest.

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