Proposals for *Improvement* and *Call* for Institutional and Legislative *Action in Addressing CVD in Spain*

Prepared by BioInnova Consulting, a professional services company specializing in strategic and operational consulting in healthcare, based on conclusions drawn from expert meetings of *Pulso Vital – Cardiovascular Alliance.*

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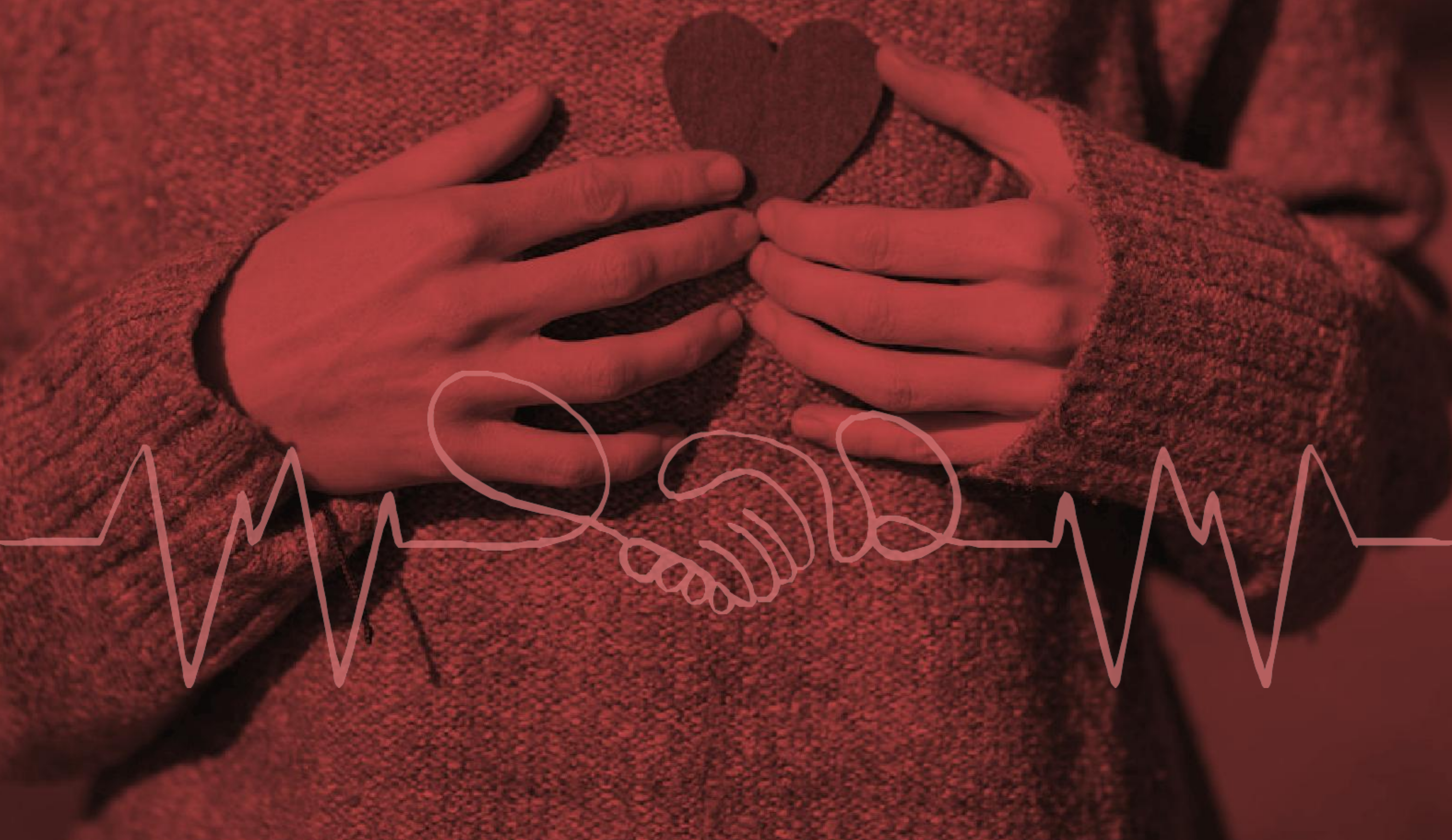
CONTEXT AND INTRODUCTION

Cardiovascular diseases (CVD) represent one of the greatest public health challenges. According to the World Health Organization (WHO), CVD are the leading cause of death globally, claiming approximately 17.9 million lives annually, which accounts for 31% of all deaths worldwide[1].



In the European context, according to recent data discussed in a session of the European Union (EU) Council under the Hungarian presidency, CVDs cause approximately **1.7 million deaths annually within the EU.** This alarming figure has made CVDs **a priority on the European health agenda**. In a recent working session titled "European Action Against Cardiovascular Diseases," EU Health Ministers emphasized the **critical need for concrete strategies to fight these diseases,** recognizing them as the leading cause of mortality in the EU.

In **Spain,** the situation is equally alarming: CVDs causes the death of an average of 431 people daily, for a total up **to 157,315 annual deaths**[2]**.** This figure highlights the magnitude and the urgent need to address this public health issue.

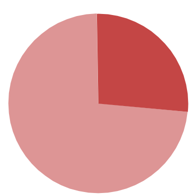
According to the latest data provided by the National Statistics Institute (INE) of Spain, **in 2023, CVDs were the second leading cause of death in Spain,** representing the 26.5% of total deaths, slightly surpassed by tumors at 26.6%. Compared to the previous year, deaths from these pathologies increased by 0.2%, while those caused by circulatory system diseases **decreased by 5.3**[3]**%.**

This contrasting trend motivated that, **for the first time, the mortality rate from tumors** (237.8 per 100,000 inhabitants) surpassed the ones caused by **circulatory system diseases** (237.5) [3].

Despite this reduction in mortality, CVDs remain **a leading cause of death and disability in Spain.** Among deaths caused by circulatory system diseases, ischemic heart diseases were **the most frequent cause of death in 2023,** with **27,203 fatalities**, a 6.4% decrease compared to 2022. They were followed by cerebrovascular diseases, with 23,173 deaths (a 6.1% decrease) [3].

157.315

Annual deaths caused by CVD



26,5%

of the total deceases in 2023 was related to CVD

It is important to highlight that, in addition to their impact on mortality, CVDs also have a **significant economic impact.** According to a research team from the Health Economics Research Centre at Oxford Population Health, the cost of CVDs in the European Union was estimated to be in 2021 around **282 thousand million euros**[4]**.**

Despite their high incidence, most CVD are **preventable: modifiable risk factors** such as smoking, sedentary lifestyle, unhealthy diet and alcohol consumption contribute significantly to the increased incidence of these diseases. Therefore, **better prevention and management** of these diseases could **save millions of lives each year** and substantially reduce healthcare costs.

In response to this problem, the **Ministry of Health** developed **the National Health System Cardiovascular Health Strategy** (ESCAV), approved in April 2022, with the aim of improving the approach to cardiovascular health through a **comprehensive and equitable approach**, addressing key aspects such as primary prevention, early detection, treatment and rehabilitation.

"Most CVD are preventable [...] A better and management could save millions of lives each year"

In this context rises **Pulso Vital – Cardiovascular Alliance**, with the aim of continuing to contribute to reducing the incidence and mortality of CVD, as well as promoting value strategies **focused on excellence** in the **comprehensive approach** to them (diagnosis, prevention, treatment and follow-up).

In order to achieve this purpose, **4 specific objectives** or **strategic lines** have been identified to be addressed during 2024

- Develop strategies that enable excellence in the care process of cardiovascular pathology.
- Promote measures that contribute to reduce inequity in the prevention and treatment of CVD (and its co-morbidities).
- Increase the visibility of CVD and raise public awareness of its prevalence and impact.
- Promote that cardiovascular diseases become a priority in the political and management field.

These strategic lines are aligned with the **World Health Organization's global targets** to **reduce premature mortality** from non-transmissible diseases, including CVD, by 33% by **2030**[5].

METHODOLOGY

As a starting point for the activities to be developed in the framework of this **Cardiovascular Alliance**, a **multidisciplinary committee** of **22** high-level national **experts** has been created.

This Committee has been divided into **4 working groups**, each composed of 5/6 experts, and each group has focused on one of the 4 strategic lines identified, with the aim of **specifying proposals for their implementation.**

During the **first meeting** of the Committee of Experts (CoE), held on 9 May 2024 at the Casa del Corazón, **the main challenges of cardiovascular diseases in Spain** were discussed.

and the corresponding proposals were identified and specified to help promote these 4 strategic lines**.**

Following this meeting, the **3-5 key proposals from each group** were selected and discussed during the **second CoE meeting** on 26 June 2024.

These proposals were evaluated according to the following **specific criteria**:

SCOPE OF IMPLEMENTATION	National/Regional/Local	LEVEL OF IMPACT	○○○○○
Determine whether the proposed measure should be implemented at national, regional or local level, justifying the response. Some proposals may be relevant for multiple levels of implementation.		Explain and rate the potential level of impact that the implementation of this measure could have on the management of CVD, using a scale from 1 to 5, where 5 represents the highest impact.	
STARTING POINT	○○○○○	VIABILITY/ ACTIONABILITY	○○○○○
Identify the current situation, evaluating it on a scale of 1 to 5, where 1 indicates a poor state and 5 represents an ideal situation. If considered necessary in any proposal, the resources needed to achieve the desired objectives will be identified.		Evaluar la viabilidad de la medida en términos de acción, utilizando una escala del 1 al 5, donde 1 representa una accionabilidad a largo plazo/viabilidad muy baja, y 1 a corto plazo/viabilidad muy alta.	

In the evaluation process, each proposal was carefully examined in terms of how it met these criteria, ensuring that those selected had a **significant impact** on the **cardiovascular field** and contributed to the **fulfilment** of ESCAV's **strategic objectives**.

All the information gathered in both meetings has been unified in this final **report** entitled ***'Proposals for improvement and call for institutional and legislative action in addressing CVD in Spain',*** which was presented to the different stakeholders at the Congress of Spain in September 2024.

Finally, this report has **prioritized the proposals identified** in a **Decalogue** according to the specific criteria described above.

In addition, with a view to **2025**, Pulso Vital plans to address **new strategic lines** with the aim of identifying emerging challenges in this area and develop innovative proposals to address them. The Alliance will also **continue to integrate new partners** to broaden and **strengthen the joint work network.**

Experts Committee meeting on June 26.

"Pulso Vital plans to address new strategic lines with the aim of identifying emerging challenges in this area and develop innovative proposals to address them"

COMMITTEE OF EXPERTS

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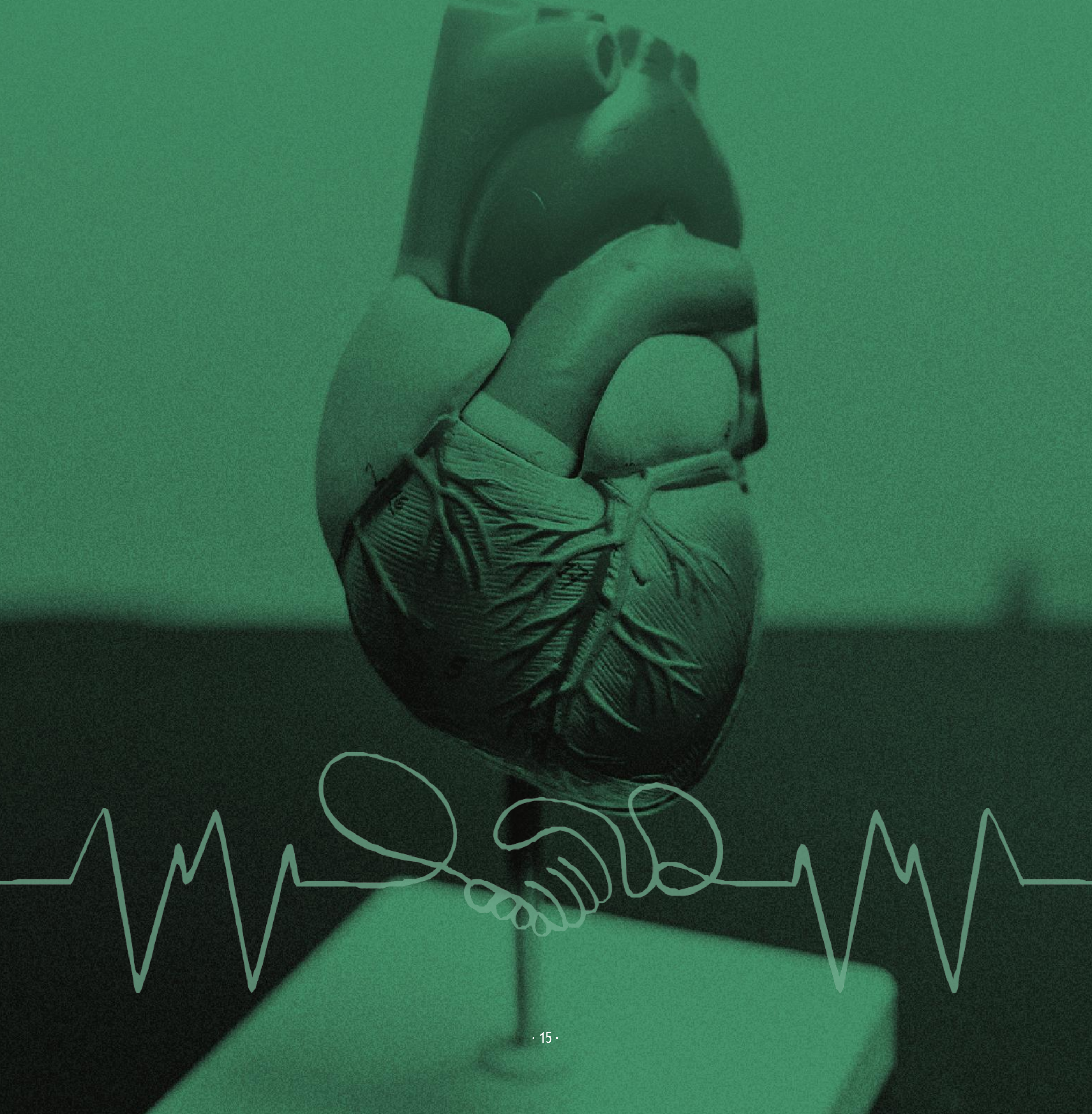
LINES OF WORK AND WORKING GROUPS (WG)



WG 1: Development of strategies to achieve excellence in the **care process of cardiovascular pathology.**

Develop a **shared information system** that allows the **effective coordination between all levels**, and enables all health professionals to access complete and up-to-date patient data.

This will require defining the technical and functional requirements to **integrate data from multiple sources and ensure the interoperability of the system.**

SCOPE OF IMPLEMENTATION	National/Regional	LEVEL OF IMPACT	●●●●●
The ideal implementation should be at a **national level**, as population mobility is a reality nowadays. However, due to the difficulty of short-term feasibility, **coordination at regional level** could be a good starting point.		**Very high**. This system would facilitate comprehensive and coordinated care for patients with cardiovascular risk.	
STARTING POINT	●○○○○	VIABILITY/ ACTIONABILITY	●●●○○
Very low/limited. This process, as ideally a national shared system, should be led by the Ministry of Health. To drive this measure, material, human and political resources are required (especially from the Ministry with subsequent implementation in the various Autonomous Communities).		**Moderate and implementable in the medium term**. This system could be implemented progressively, achieving full implementation within 3 to 5 years. This is due to the incompatibility of the different current IT systems in the National Health System and the complexity of integrating multiple data sources. In addition, this system must be accessible to patients.	

2

Strengthen the role of primary care and, in particular, nursing care in the prevention of cardiovascular risk. To this end, comprehensive and continuous care would be offered to patients, focusing on **early detection, monitoring education and management of factors** that may trigger cardiovascular diseases, ensuring preventive and personalized care.

SCOPE OF IMPLEMENTATION	National/Local	LEVEL OF IMPACT	●●●●●
The initiative should be extended to the national level, although implementation should be at t local level.		Very high. Moreover, this measure is economically feasible and realistic, with a focus on personalized and continuous preventive care.	
STARTING POINT	●●●○○	VIABILITY/ ACTIONABILITY	●●●●○
Intermediate, since Primary Care is already working on cardiovascular risk prevention. Despite the high nursing workload, the medical reports created by this service already include detailed and useful information for the actionability of this measure.		High and implementable in the short to medium term. This measure is already under development, with special emphasis on risk-adapted preventive measures for each patient.	

3

Implement a standardized cardiovascular risk stratification system, that takes into account risk modifiers such as socio-demographic, lifestyle, clinical and socio-economic variables, in order to avoid inequity. This system would be implemented uniformly at all levels of care nationwide, allowing the identification of patients with higher risk and the application of appropriate preventive and treatment measures.

SCOPE OF IMPLEMENTATION	National/Local	LEVEL OF IMPACT	●●●●●
This measure would be implementable at **national level** and applicable at **local level**. In this context, the Score 2 OP scale, used as a reference at European level, could be taken into account. Moreover, the addition of **'risk modifiers'** (socio-health level, environmental pollution, comorbidities, inflammation, etc.) would be of interest in order to **individualize the scale** according to the characteristics of each patient.		**Very high.** This measure would allow the identification and appropriate treatment of patients at higher risk and could prevent serious cardiovascular events.	
STARTING POINT	●●○○○	**VIABILITY/ ACTIONABILITY**	●●●●○
Low. The degree of implementation differs according to the healthcare center where it is carried out; for example, in the case of the population of Madrid, 18% have their cardiovascular risk registered.		**High and implementable in the short-medium term**. In this case, it would be necessary to facilitate the healthcare staff the chance to fill in patient information in the visit room. The main difficulty for this measure is the IT systems, which could be solved by creating alerts and automating the data entry. Iin order to encourage compliance with this measure, KPIs could be incorporated into the contracts of the healthcare centers/areas.	

4

Implement **validated clinical practice guidelines** and develop **continuity of care protocols for cardiovascular care.** These guidelines should be adopted and **applied by all professionals**, ensuring a coordinated approach between all levels of care. To encourage the achievement of this measure, KPIs could be incorporated into the program contracts of the health center/areas.

SCOPE OF IMPLEMENTATION	National	LEVEL OF IMPACT	●●●●●
National implementation, ensuring the adoption and application of the guidelines by all professionals.		**Very high.** This measure would allow the identification and appropriate treatment of patients with high risk, which could prevent serious cardiovascular events.	

STARTING POINT	●○○○○	VIABILITY/ ACTIONABILITY	●●●○○
Very low due to poor communication between levels of healthcare, which complicates the continuity of care more than following the guidelines. It is crucial to homogenize these existing guidelines and address local disparities to improve care and ensure continuity of care.		**Moderate and implementable in the medium term**. Although guidelines are already in place, the main challenges lie in the effective coordination for the development in healthcare protocols in continuous care between different levels and the lack of professionals to ensure the correct application and monitoring of these protocols.	

5

Develop and implement a hospital release report that includes key information to ensure continuity of care.

and facilitate patient follow-up. This report should be **explained and accessible to patients and careers.**

SCOPE OF IMPLEMENTATION	National	LEVEL OF IMPACT	●●●●○
National Scope		**High** and with a direct impact on continuity of care.	
STARTING POINT	**●●○○○**	**VIABILITY/ ACTIONABILITY**	**●●●●○**
Intermediate, since Primary Care is already working on cardiovascular risk prevention. Despite the high nursing workload, the reports that this service produces already include detailed and useful information for the actionability of this measure.		**High and implementable in the short-medium term.** To make the measure actionable, it should be mandatory to include diagnosis, control targets, recommended treatment and follow-up in the reports. Improving existing IT systems is a key task to streamline and standardize this process.	

WG 2:

Promotion of measures that contribute to **reduce inequity in the prevention and treatment of CVD** (and its co-morbidities)

Secure funding for ESCAV and develop a set of **monitoring indicators for its implementation** in the Autonomous Communities. These indicators should consider the socioeconomic aspects of the target population and cover critical aspects of the strategy such as primary care, secondary care, the continuity of care, access to innovative treatments and health outcomes.

SCOPE OF IMPLEMENTATION	National/Regional	LEVEL OF IMPACT	●●●●●
A dual funding is proposed: **national** to guarantee minimums and **regional** for specific projects. There should be a common national strategy with minimum funding and conditions, allowing regions to allocate funds according to their needs. In addition, all Autonomous Communities should be provided with **measuring tools** to assess the impact of funding.		**Very high.** Identifying more patients with cardiovascular risk would reduce both the incidence of cardiovascular disease and the economic impact on the health care system.	
STARTING POINT	●○○○○	**VIABILITY/ ACTIONABILITY**	●●●○○
Very low. So far, a minimal budget has been allocated for the implementation of the strategy, although there is an application at national level for European funds linked to ESCAV.		**Moderate and implementable in the medium term**. To get initial funding and continuity, it would be necessary to justify efficiency and results, include patients and scientific societies, involve the media and be aligned with the European strategy.	

Ensure that the **common portfolio of services and therapeutic care benefits is available** in all autonomous communities and hospitals, therefore guaranteeing **uniformity** in **the criteria** to access medicines throughout the whole national territory. To achieve this, services and benefits must be identified and defined, based on scientific evidence and clinical practice guidelines.

SCOPE OF IMPLEMENTATION	National	LEVEL OF IMPACT	●●●●●
National. It is crucial to establish a portfolio of healthcare services and benefits that is common to all the Autonomous Regions in order to ensure uniformity in the criteria for access to medicines throughout the country. The identification and definition of these services should be based on scientific evidence and clinical practice guidelines.		Very high. This measure would ensure equal treatment opportunities for all patients, as well as uniformity in the freedom of prescribing by healthcare professionals, avoiding the current disparities in care standards between different regions.	
STARTING POINT	●●○○○	VIABILITY/ ACTIONABILITY	●●○○○
Low. Currently, there is no standardized minimum portfolio in all the Autonomous Regions, which generates marked inequalities. This situation is also due to the lack of clarity in the processes of evaluation and positioning of the different therapeutic alternatives, as well as the discretionary interpretation by the different regional and local decision-makers.		Low and implementable in the medium to long term. There would be a potential reluctance by part of the different Autonomous Regions to make changes in the financing of the portfolio of services, which could complicate the implementation of this measure.	

3

Develop a strategic plan for **resource allocation** and expansion of sanitary infrastructure, specifically focused on **rural areas** and **regions with greater needs and inequality in access** to cardiovascular care. This should include specific targets, detailed timelines and a clear designation of those responsible for effective implementation.

SCOPE OF IMPLEMENTATION	Local	LEVEL OF IMPACT	●●○○○
Rural areas and regions with the greatest needs would have a better understanding of the social factors and specific needs of their population, which would **make local implementation more effective.**		**Low**. Although the measure is crucial, its impact would be limited because it affects a smaller population. However, improving the health infrastructure in these areas would have significant effects on the affected population.	
STARTING POINT	●●○○○	VIABILITY/ ACTIONABILITY	●●●○○
Low. Several local initiatives are being developed, but **lack of central coordination** to ensure their effectiveness and continuity.		**Moderate and implementable in the short to medium term**. The **equity** law being implemented by the Ministry of Health provides additional support for this measure. The implementation of a strategic plan aligned with this law could facilitate the **mobilization of resources** and the **expansion of health infrastructure** in areas in need.	

Design and **implement training and awareness-raising** programs for **health care professionals**, with the aim to equip them with the tools to provide a more equitable care, especially in the **prevention and management of CVD in women.**

SCOPE OF IMPLEMENTATION	Regional	LEVEL OF IMPACT	●●●●○
Each region should perform a **diagnostic** of its healthcare professionals and **provide the necessary training** to ensure equitable care in the prevention and management of CVD in women.		**High**. Training and awareness-raising of healthcare professionals **would improve preventive care and management of CVD** in women, addressing gender inequalities in health care and promoting better prevention, diagnosis and treatment.	
STARTING POINT	●●●○○	VIABILITY/ ACTIONABILITY	●●●●●
Intermediate. There are notable variations in the level of training and awareness of healthcare professionals regarding equitable CVD care for women, which means that the situation is very diverse depending on the Autonomous Community, and even within the regions themselves.		**Very high and implementable in the short term**. This measure would be **very achievable** and **politically attractive** due to the interest and funds available through the pharmaceutical industry for training. There is a large number of resources allocated for education that could be used to implement such **training and awareness programs.**	

WG 3:
Increase the visibility of CVD and **raising public awareness of its prevalence and impact**

Promote **primary and elementary prevention** from an early age by including a **specific subject** of **health education** in the curricula of schools and high schools, focusing on the importance of heart-healthy habits, such as a balanced and healthy diet and regular physical activity.

SCOPE OF IMPLEMENTATION	National	LEVEL OF IMPACT	●●●●●
National. This initiative should cover all children and adolescents, with special emphasis on the under-13 population.		**Very high**. Promoting healthy habits from an early age would have a significant impact on the appearance of risk factors and therefore on the incidence of these diseases, as well as being a highly cost-effective initiative.	
STARTING POINT	●○○○○	VIABILITY/ ACTIONABILITY	●●●○○
Low. It would be crucial to build on precedents from other regions or countries, adapt school spaces, regulate vending machines and limit the use of screens to encourage physical activity and avoid sedentary lifestyles.		**Medium and implementable in the medium term**. This initiative would involve regulatory change at national level, the inclusion of lectures given by healthcare professionals in schools and the training of school teachers by qualified professionals. A more achievable alternative in the short to medium term would be the redesign of a subject already included in the curriculum (e.g. physical education) to include theoretical content created by healthcare professionals and regular physical exercise.	

2

Promote **cardiovascular healthy habits** and to pharmacologic treatments for patients who require it. For this purpose, it is proposed the **dissemination of messages through several channels**, adapted to the needs of each population group according to their socio-economic, demographic and cultural characteristics, and always using a simple and accessible language.

SCOPE OF IMPLEMENTATION	National	LEVEL OF IMPACT	●●●○○
This initiative would be targeted to all patients, so the outreach should be nationwide, building on existing local and regional communication campaigns.		**Medium**. Social perception of cardiovascular diseases is low, and the impact would depend on the resources invested in the campaign and its ability to reach the population.	
STARTING POINT	●●○○○	**VIABILITY/ ACTIONABILITY**	●●●○○
Low. Despite the existence of promotional and awareness materials on cardiovascular healthy habits, the outreach is not always what is expected. It would be necessary to launch publicity campaigns (TV, social networks and generic and specialized media), with the active participation of patients' associations.		**Medium and implementable in the medium to long term**. Running a campaign would be relatively easy and quick, but achieving significant results in raising public awareness is a long-term process.	

3

Implement, with patient associations, a **training program for healthcare professionals** focused on improving **effective communication** and **active listening**.

This will ensure an increase in the humanization of care, as well as the empowerment of patients and their adherence to healthy habits.

SCOPE OF IMPLEMENTATION	National/Regional	LEVEL OF IMPACT	●●●●●
It is a measure that involves all healthcare professionals, so it should be implemented at **national level, adapted to the current situation in each autonomous community.**		**Very high**. Improving communication between doctors and patients would increase trust, adherence to treatment and willingness to self-care.	
STARTING POINT	●●○○○	**VIABILITY/ ACTIONABILITY**	●●●○○
Low. Currently, the workload in healthcare centers (especially in primary care) limits consultation time and the necessary importance is not given to assertive communication. There is a clear lack of training in communication among healthcare professionals, which could lead to mistrust and misunderstandings with patients.		**Medium and implementable in the medium term.** It would require **commitment and change** from the ground up, with cross-cutting and formal training for healthcare professionals in effective communication. It would be important to generate **unified materials at national level** and to represent the voice of patients in training.	

4

Define and homogenize the **healthcare circuits** between all the healthcare professionals who can attend the patients (primary care, hospital...)

SCOPE OF IMPLEMENTATION	National/Regional	LEVEL OF IMPACT	●●●●○
The measure would be applicable at all levels of care and with a national scope, although implementation would be at regional level.		**High**. The definition of these healthcare circuits would improve continuity of care and interprofessional communication, optimizing the use of resources, increasing patient satisfaction and reducing complications and hospitalizations.	
STARTING POINT	●●●○○	**VIABILITY/ ACTIONABILITY**	●●●○○
Intermediate. Currently, some healthcare circuits exist, but they have yet to be standardized and applied. To this end, it would be important to guarantee communication regarding the patient data between healthcare professionals within the system; to include quality indicators of the process; to share successful strategies from other Autonomous Regions in order to define healthcare circuits.		**Medium and implementable in the medium term.** The implementation of these healthcare circuits would require collaboration and coordination between the different assistencial levels and regions.	

WG 4:
Promote cardiovascular disease as a **priority among the political and management systems**

Develop a **comprehensive preventive strategy for adulthood**, similar to vaccination schedules. This strategy should integrate **automatic alert systems based on population-based early detection** and should be based on a unified clinical history to facilitate communication between primary care and hospital care, ensuring the correct monitoring of homogeneous data throughout the National Health System.

SCOPE OF IMPLEMENTATION	National
National with minimum guidelines and regional adaptations. It would require a unified clinical history, as well as the implementation of early detection visits. This would increase costs and the need to hire additional staff. In turn, it is recommended that this measure should start at the age of 18, be voluntary and be accompanied by awareness-raising campaigns.	

LEVEL OF IMPACT	
Very high. This measure would standardize the detection and management of cardiovascular risk factors, facilitate early intervention, reduce the incidence and severity of cardiovascular disease, and improve public health in the long term. In addition, it would promote a culture of prevention that can lead to a significant decrease in morbidity and mortality related to these diseases.	

STARTING POINT	
Low. Detailed medical records are already available, but would need to be unified by Autonomous Regions and to be interoperable with private healthcare. A screening strategy based on family history and an automatic alert system when cardiovascular risk is detected should be considered.	

VIABILITY/ ACTIONABILITY	
High and implementable in the short to medium term. It is a measure that could be implemented relatively quickly, but other suppliers of healthcare IT systems are needed to improve the efficiency and unification of medical records and to obtain the necessary information.	

Increase **financial and human resources** at the **primary health care level** to ensure the success of prevention strategies at national, regional and municipal levels. In addition, it is necessary to establish clear and measurable performance indicators, such as participation rates and target achievement, in order to evaluate and justify financial investment

SCOPE OF IMPLEMENTATION	National/Regional	LEVEL OF IMPACT	●●●●●
The main funding should be provided from the national fundings to subsequently reorganize the budget in each Autonomous region. Finally, this regional funding should be segmented by pathology, carrying out cost-benefit studies to optimize resources and reduce associated costs.		**Very high**. Increasing financial resources is essential to improve disease prevention. However, with the existing resources, organizational restructuring and the involvement of other actors should be implemented to ensure the success of the strategies.	
STARTING POINT	●○○○○	VIABILITY/ ACTIONABILITY	●●●○○
Very low. While increasing staffing may enhance success, it does not itself guarantee it. A gradual restructuring with defined annual targets would be required. In addition, HR management in healthcare systems as a whole can be considered poor or very poor, which is a major obstacle to the implementation of measures unless new actors (mutuals, private health, pharmacies, etc.) are allowed to collaborate.		**Medium and implementable in the short to medium term.** Increasing funding may be complicated in the current context, but an effective reorganization could be more acceptable, manageable and achievable in the short-medium term for the Autonomous Regions.	

3

Establish a **prevention program** accessible to the entire population, through **training activities** with clear, concise information adapted to the variability of the population (social determinants). This will promote self-responsibility in monitoring cardiovascular health and ensure universal access to prevention and treatment.

SCOPE OF IMPLEMENTATION	National	LEVEL OF IMPACT	●●●●○
National. Implementation of publicity campaigns and control of information channels to prevent the spread of misinformation.		**Very high.** An accessible prevention programme and good health education could empower the population to monitor their health, reducing the incidence of disease and improving access to prevention.	
STARTING POINT	●●○○○	VIABILITY/ ACTIONABILITY	●●●○○
Low. Health promotion and disease prevention programmes exist, but they do not have the desired impact on the population. The implementation of an age-appropriate training programme could significantly improve awareness and hence the results.		**Moderate and implementable in the medium term.** Achievable with the current tools available. The necessary infrastructure and resources are available, but proper planning and implementation would be required.	

4

Create a **follow up** public report monitoring the situation in the Autonomous Communities with the acquired commitments. To this end, it would be important to develop health indicators that are visible to citizens and comparable with the rest of the Autonomous Communities. These reports will include specific indicators of progress and impact, which will aloud to assess regional progress and adjust strategies according to local and regional needs.

SCOPE OF IMPLEMENTATION	National	LEVEL OF IMPACT	●●●●●
National. Develop a cardiovascular disease 'observatory' to monitor and establish common CVD markers. Draft a first report to determine the current situation and inequities in the national territory.		**Very high**. Public monitoring reports are crucial to evaluate the progress, as well as adjusting strategies and ensuring transparency and equity in health care and are a necessary tool for continuous improvement of the health system.	
STARTING POINT	●○○○○	VIABILITY/ ACTIONABILITY	●●○○○
Very low. An initial report is needed to understand the national equity gaps in addressing CVD and to reevaluate them over time. This initial report is essential to establish a baseline and to target the resources where they are most needed.		**Low and implementable in the medium to long term.** Requires access to and standardization of data registers. In this sense, viability is limited due to the diversity of registers between Autonomous Regions. To promote this initiative to standardize data and indicators, it is necessary that the Ministry of Health takes the lead to ensure cohesion and equity. Furthermore, resources should be associated with monitoring follow up indicators.	

DECALOGUE OF PROPOSALS

ONE

Strengthen the role of primary care and nursing in the prevention and monitoring of CV risk, increasing the allocation of economic and human resources at the first level of care.

- Include in the healthcare portfolio a comprehensive and continuous care for patients, with a focus on early detection, follow-up, education and management of factors that may trigger cardiovascular diseases, ensuring preventive and personalised care.
- Implement specific training programmes on cardiovascular risk for doctors and nurses.

TWO

Implement a standardized cardiovascular risk stratification system.

- Develop a digital tool at National level for cardiovascular risk stratification, integrating sociodemographic and lifestyle variables.
- Integrate this tool with the electronic medical record to facilitate its use in daily practice.

THREE

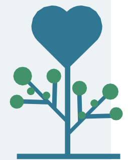
Develop a comprehensive preventive strategy with automatic warning alerts.

- Create a national alert system based on digital health records, which sends automatic reminders for regular screenings and check-ups.
- The objective is to improve primary and secondary prevention through a proactive and personalized approach.

FOUR

Design and implement training and awareness-raising programs on CVD management, especially in women, for healthcare professionals.

- Promote specialized training to achieve an equitable care, through online and face-to-face courses on CVD in women, including modules on atypical symptoms and specific risk factors.
- Create a mentoring program between cardiologists and primary care physicians, nurses and pharmacists.



FIVE

Develop and implement a hospital release report to ensure continuity of care and patient follow-up.

- Create a standardized release report template that includes a plan of diagnosis, treatment, detailed follow-up and therapeutic of diagnosis, treatment, detailed follow-up and therapeutic control targets to ensure an appropriate and safe transition from hospital to primary care.
- Implement a system of automatic notification to the primary care/nursing doctor after patient release from the hospital.

SIX

Secure the funding for ESCAV and develop a set of monitoring indicators for its implementation in the Autonomous Communities.

- Allocate a specific budget for ESCAV both in the National Generale Budget and at regional level.
- Create a scorecard with key processes and outcome indicators, as well as publishing annual follow-up reports by the Autonomous Communities to ensure proper monitoring of its implementation.

SEVEN

Implement nationally validated clinical practice guidelines and develop protocols on continuous assistance for cardiovascular care, including a shared information system that allows the effective coordination between all levels of care.

- Homogenize health care circuits between Autonomous Communities and improve interprofessional communication, through dissemination and training.
- Implement a system of shared medical history records between care all assistance levels and between Autonomous Communities, with a specific module for cardiovascular health.
- Incorporate key performance indicators (KPIs) in the IT contracts of the different healthcare centers and/or areas.

EIGTH

Ensure that the common portfolio of services and healthcare and therapeutic benefits is available in all Autonomous Regions and hospitals, and implement a public follow-up report of the status on the acquired commitments.

- Define a minimum and mandatory portfolio of services for cardiovascular diseases for all Autonomous Communities. This portfolio should be partially aligned with the draft Law to consolidate the equity and cohesion of the National Health System, approved in June 2024 by the Council of Ministers.
- Create a national cardiovascular health 'observatory' with public biannual reports, to promote equity in healthcare and transparency of management.

NINE

Establish a prevention program, as well as an adherence program to pharmacological treatments, which are adapted, targeted and accessible to the entire population.

- Create a 'CVD expert patient' programme to train and support patients.
- Develop a prevention and adherence argumentation, with the active participation of patient associations.
- Disseminate this document through general and specialized media.
- Include a specific health education subject in school curricula, focusing on the importance of cardiovascular-healthy habits.

TEN

Develop a strategic plan for resource allocation and expansion of healthcare infrastructure, focusing on areas with unequal access to cardiovascular care.

- Create a mapping of cardiovascular care needs by geographic area, aligned with the patient stratification based on cardiovascular risk.
- Implement mobile cardiovascular diagnostic units in rural areas and areas with special socio-demographic conditions, with the objective of reducing inequalities in cardiovascular care that are not caused by the own genetic code.

CONCLUSIONS

This report *"Proposals for improvement and a call for institutional and legislative action in the approach to CVD in Spain"* represents a **significant milestone** e in the fight against cardiovascular diseases in our country and **a call for coordinated a**ction for all actors in the Spanish healthcare system**.**

As a result of an exhaustive analysis, and through the collaboration of a multidisciplinary panel of experts, this document not only identifies key areas for improvement, but also proposes **an action plan with concrete measures to address the existing challenges in cardiovascular health in Spain**.

In the same line, the **Council of the European Union**, under the Hungarian Presidency, has put cardiovascular diseases as a **priority of its agenda.**

The strategic lines proposed and the proposals suggested in this document constitute a **comprehensive approach** covering a broad spectrum of actions, from the strengthening of primary care and the implementation of cardiovascular risk stratification systems, to the development of comprehensive preventive strategies and the improvement of the training of health professionals.

This holistic approach considers all aspects of the care process**: primary and secondary prevention, early diagnosis, effective and personalized treatment and continuous long-term follow-up of patients**; all backed up by solid scientific evidence base thanks to the panel of experts involved, and adapted to the Spanish socio-health reality.

This decalogue of proposals presented **are the cornerstone of this report**, offering a specific and achievable plan of action to significantly improve the approach to CVD in Spain

These **ten priority actions** have been carefully
selected for their potential impact and viability, and represent a commitment to excellence in the cardiovascular care.

The **implementation** of these proposals intends to establish a **quality mark of excellence in the approach and impact of cardiovascular diseases in Spain and serves to reinforce the Cardiovascular Health Strategy of the National Health System.**
By adopting a comprehensive approach, involving all levels of the healthcare system, a substantial improvement in cardiovascular health outcomes in the Spanish population is expected.

A crucial aspect of this report is its **commitment to transparency and continuous improvement**, with particular emphasis on equity in access to care and follow-up, ensuring **greater cohesion in the National Health System.**

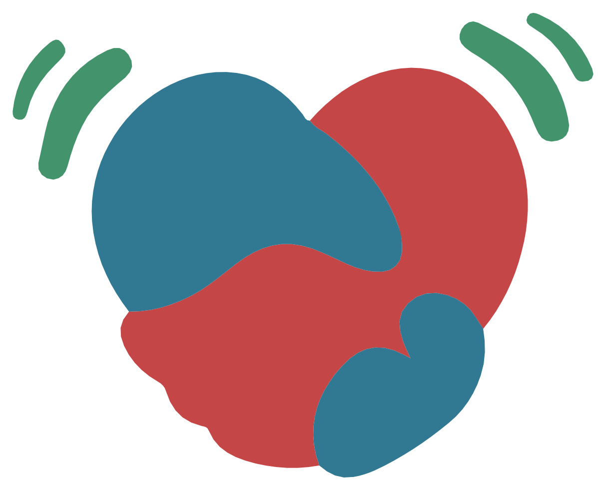
This document will set the groundwork for a deep transformation in the approach to cardiovascular diseases in Spain,
thus, setting a precedent in the way these pathologies are managed at national level.

The implementation of these proposals intends to establish a quality mark of excellence in the approach and impact of cardiovascular diseases in Spain and serves to reinforce the Cardiovascular Health Strategy of the National Health System.

In conclusion, this roadmap represents a call to action for all *stakeholders* in the Spanish healthcare system.

Its **success** will depend **on the close collaboration between institutions, healthcare professionals, patients and civil society**.

With the implementation of these proposals, Spain has the opportunity to **lead the way towards a future with a lower incidence and better management of cardiovascular diseases**, significantly improving the quality of life of its citizens and the efficiency of the Healthcare System.



Spain has the opportunity to lead the way towards a future with a lower incidence and better management of cardiovascular diseases

BIBLIOGRAFY

1. **WORLD HEALTH ORGANIZATION.** (2021). Cardiovascular diseases (CVDs). https://www.who.int/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds)

2. **IMMEDICOHOSPITALARIO.** (2024). Cardiovascular diseases claim the lives of an average of 431 people in Spain every day. Retreived from https://www.immedicohospitalario.es/ noticia/46086/las-enfermedades-cardiovasculares-se-cobran- diariamente-la-vida-de-u.html

3. **NATIONAL DE STADISTICAL INSTITUTE.** (2024). Death Statistics according to Cause of Death. Year 2023.

4. **SPANISH JOURNAL OF HEALTH ECONOMICS.** (2024). The economic cost of CVD to European healthcare systems. https://economiadelasalud.com/topics/difusion/casi-300-000- millones-de-euros-el-coste-economico-de-las-ecv-para-los-sistemas-sanitarios-europeos/

5. **WORLD HEALTH ORGANIZATION.** (2018). Noncommunicable diseases country profiles 2018.

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