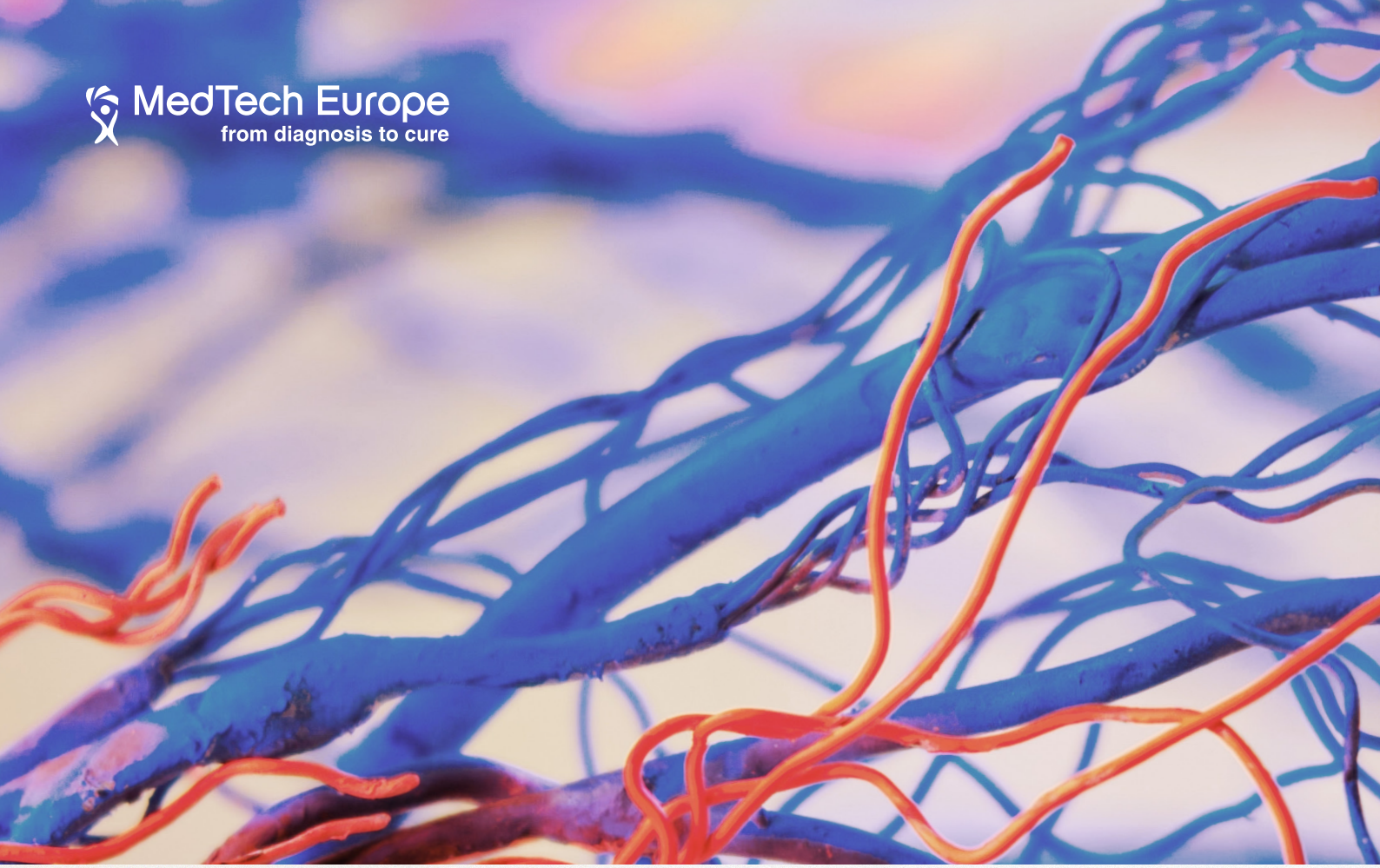
MedTech Europe
from diagnosis to cure



MedTech Europe Cardiovascular Sector Group

Position on an EU Council Recommendation on health checks for cardiovascular diseases

29/05/2026

The need for early detection

Cardiovascular disease (CVD) remains the leading cause of mortality and morbidity in the European Union (EU), accounting for approximately 1.7 million deaths in 2021, representing 32% of all deaths.[1] Today, some 60 million Europeans are living with CVDs, which is more than the entire Italian population. CVD are also the leading cause of death in women and are linked to huge inequalities across geography and socio-economic status.[2]

The prevalence of CVD and related mortality are anticipated to rise due to factors such as demographic change and increasing prevalence of risk factors like obesity, hypertension, and diabetes, underscoring the urgent need for proactive measures. Beyond the profound personal loss, CVD imposes a substantial economic burden. The total cost of CVD to the EU economy surged from €210 billion in 2017 to €282 billion in 2021, an increase of 34% in just four years.[2]

Early prevention, detection and diagnosis of cardiovascular conditions and their comorbidities—in addition to managing them efficiently when they occur –is essential to keeping citizens of all ages out of hospital and in good health, while making efficient use of healthcare resources. Improving secondary prevention in only six European countries (Denmark, France, Germany, Italy, Poland, and the UK) could prevent over 670,000 CVD deaths over the next ten years,[3] and contribute to reducing limb amputations, of which a vast majority is driven by peripheral arterial disease (PAD) and diabetes.[4]

As achieving these gains depends on timely detection, the EU could leverage so much more benefit from medical technologies to tackle the burden of CVD.[5]

However, cardiovascular checks are not routine across the European population, leading to huge under-detection, even in the at-risk population as defined in ESC guidelines.[6] Most Member States continue to face challenges in ensuring effective prevention and early detection of CVD risk factors.[7] A third of respondents to a 2019 European survey of people aged over 60 said their primary care physician checked their heart with a stethoscope "occasionally", while only 28% had their heart checked at every visit.[8]

Addressing the burden of CVD through targeted and risk-stratified health checks based on scientific guidelines

Against this backdrop, the MedTech Europe Cardiovascular Sector Group welcomes the EU **Safe Hearts Plan's flagship initiative on an EU protocol on health checks for cardiovascular diseases** which foresees the adoption of Council Recommendations for the development of a structured and harmonised approach to cardiovascular screening at the EU-level to support Member States in moving from fragmented and opportunistic detection towards systematic, risk-based screening. The definition of such a protocol can contribute to attaining the Safe Hearts Plan's goal of achieving a **25% reduction in premature cardiovascular mortality by 2035**.

The MedTech Europe Cardiovascular Sector Group supports early detection as suggested in guidelines issued by medical societies such as the European Society of Cardiology (ESC), which recommend the protocol to include targeted screening for key cardiovascular risk factors and major comorbidities, enabling age and risk-appropriate assessments, and cardiovascular health checks across diverse populations.[9]

Prioritising high-risk populations to maximise impact on reducing the CVD burden

In order to achieve the objective of reducing CVD mortality by 25% by 2035, and acknowledging that screening programmes should consider country capacity, available resources, and the sustainability of the health systems to manage follow-up care, a cardiovascular health check should focus, first and foremost on populations where intervention can prevent the most deaths and disability and target the most at-risk groups, with the protocol based on risk stratification and proportionate follow-up.

While it is important to adopt a life-long prevention approach and screen from young age to modify risk factors and prevent disease progression, high-risk individuals account for a disproportionate share of CVD deaths and events and individuals over 65 experience exponentially higher rates of cardiovascular events and deaths compared to a younger population. For instance, approximately 50% of individuals over 65 are affected by hypertension compared to less than 10% of the population aged under 45. In 2022, approximately 34,8% of all deaths in the EU among the population aged 65+ were caused by CVD,[10] and with the EU's over-65 population expected to reach 129.8 million by 2050,[11] systematic screening at this threshold directly supports the Safe Hearts Plan's objectives.[12]

We therefore call for the Council Recommendation to foresee systematic screening for **individuals above 65 years of age**, with a check-up to take place at

least **every two years**, including the following tests, also recommended by the relevant European scientific societies:

- **Health behaviours and risk factors** through a complete lifestyle and health behaviour evaluation, as per ESC recommendations;[13] mental health assessment, detailed family history, sleep apnoea, age at menopause
- **Cardiac and vascular assessment** including blood pressure, cardiac auscultation, and ECG
- **Cardiometabolic, kidney and vascular risk factors** such as BMI and waist circumference or waist-to-height ratio, full lipid profile including (total cholesterol, LDL-C, HDL-C, triglycerides), fasting plasma glucose (FPG), glycated haemoglobin (HbA1c); kidney function (eGFR, albuminuria); peripheral pulse evaluation and ankle-brachial-index for peripheral artery disease (PAD)
- **Additional testing** should be adapted to individual/local risk profiles, family history, ethnicity, dynamic cardiometabolic-renal risk factors, with selective use of additional risk-stratification tools, such as:
  - **Coronary artery calcium (CAC)** scoring if any abnormality is suspected in the clinical examination or where cardiovascular risk assessment remains uncertain.
  - **NT-proBNP testing** for early identification of patients suspected of de novo heart failure in an out-patient setting,[14] and in those individuals at increased heart failure risk such as diabetes.[15]
  - Opportunistic checks should be undertaken when in contact with the healthcare system; transthoracic echocardiography should be undertaken if any abnormality is suspected in the clinical examination.

Furthermore, **at-risk individuals** across all age groups should be screened through targeted programmes with expanded eligibility and increased intensity, reflecting current scientific evidence and local circumstances.

As CVDs account for 40% of all female deaths in Europe,[16] the EU Council Recommendation should include **targeted screening efforts for women**, who remain underdiagnosed and undertreated, through gender-sensitive approaches supported by awareness initiatives. This is not only a health equity imperative but a cost-effective measure, as evidence shows that preventive CVD screening yields measurably lower long-term healthcare expenditure.[17]

Integrating screening and referral: building seamless pathways from detection to treatment

Effective CVD screening must be supported by coordinated referral systems that connect detection with timely, evidence-based care. Screening programmes should leverage medical technologies, digital solutions, and AI tools with demonstrated effectiveness, which can be coordinated through primary care, where providers can initiate risk assessment and refer patients to appropriate diagnostic services when clinically indicated.

Detection alone cannot reduce CVD burden: efficient, personalised pathways are essential to connect screening with treatment. A European cardiovascular health check programme must establish timely referral to specialist care through standardised EU guidelines and integrated care models that address current fragmentation and variability across Member States that cause treatment delays, poorer outcomes, and healthcare inefficiencies.

The Safe Hearts Plan's upcoming **EU Recommendation on Improved CVD Treatment**, including digital tools for personalised care and an **EU Network of Cardiovascular Health Centres**, represent a critical step forward. These specialised centres will bring together expertise to facilitate diagnosis, treatment, rehabilitation, and long-term care. To maximise impact, these initiatives should establish a quality assurance scheme defining common requirements for cardiovascular and stroke services, ensuring consistent, high-quality care across Europe.

Critical elements for successful cardiovascular disease screening: support, monitoring and impact measurement

Effective cardiovascular disease screening programmes require robust governance structures, comprehensive outcome measurement frameworks supported by data systems, and accessible evidence-based services to ensure quality, equity, and value. Health authorities should establish structured frameworks for informed decision-making, programme assessment, effective communication, support to workforce development and system capacity-building. The EU should support Member States in investing in multidisciplinary training programmes for healthcare professionals, particularly in primary care, funded through EU Health Programmes, Research Framework Programmes, and Cohesion Funds.

We believe that, through the above approach, the implementation of cardiovascular health checks across Europe would provide for timely interventions that improve outcomes, reduce long-term healthcare costs, optimise patient well-being, and contribute to a 25% reduction in mortality and disability by 2035, in line with the EU Safe Hearts Plan goals, while also enhancing the quality of life of patients.

About MedTech Europe and the Cardiovascular Sector Group

MedTech Europe is the European trade association for the medical technology industry including diagnostics, medical devices and digital health. Our members are national, European and multinational companies as well as a network of national medical technology associations who research, develop, manufacture, distribute and supply health-related technologies, services and solutions. The MedTech Europe Cardiovascular Sector Group represents the Cardiovascular Medical Technology Industry, which provides solutions to the burden of CVD on individuals, families and the wider society and economy.

Medical technologies play a central role in the fight against CVD. These innovations, which span the full spectrum of patient care from diagnosis to cure, save lives and add tremendous value to European society. High quality medical technologies are central to Europe's quest for better cardiovascular health and can be found throughout the patient journey, for instance: the blood tests that identify patients with high cholesterol, high risk of heart attack and heart failure; the modern imaging devices that detect narrowing of the arteries; the small cardiac implants such as pacemakers, defibrillators and trans-catheter technologies; the implantable cardiac monitors and associated home monitoring solutions; the minimally invasive heart valve and stent procedures that improve clinical, procedural and patient outcomes, while reducing associated costs and recurrence.

ANNEX
Selected Case Studies on Early Detection

Preventive "CheckUp 35" programme in Germany

Germany's statutory, insurer-funded "CheckUp 35" health examination is available every three years for adults aged ≥35 years and covers the near-entirety of the population through the public health insurance system. The check-up includes blood pressure measurement, cholesterol and blood glucose testing, and a physical examination to identify cardiovascular disease risk factors, type 2 diabetes and kidney disease at an early stage. Approximately half of the eligible population participates in the programme within the recommended interval, and research from national health surveys confirmed an overall improvement in cardiometabolic risk factors across Germany since the programme's inception, contributing to a sustained downward trend in cardiovascular mortality.

Source

Madrid region

In the Madrid region of Spain, systematic cardiac auscultation is performed every two years for all citizens aged >65 years as part of the standardised primary care services portfolio, aiming to improve early detection of valvular heart disease. By embedding auscultation into routine primary care visits, the programme enables general practitioners to identify clinically significant heart murmurs and refer patients for further diagnostic evaluation, such as echocardiography, before valve disease progresses to a symptomatic or advanced stage.

Source

NHS Health Check (UK)

The NHS Health Check is a national cardiovascular disease prevention programme in England targeting adults aged 40–74 years without pre-existing CVD or diabetes. The programme includes a structured clinical assessment with blood pressure, cholesterol and blood glucose testing, cardiac auscultation, and referral for ECG when clinically indicated. Evidence from multiple studies shows the programme is associated with increased detection of hypertension, type 2 diabetes, chronic kidney disease and atrial fibrillation: new hypertension diagnoses occurred in 25 per 1,000 attendees compared with 9 per 1,000 non-attendees, and new diabetes diagnoses in 8 per 1,000 versus 3 per 1,000. Among high-risk attendees, the programme achieved a significant reduction in mean 10-year CVD risk scores after one year.

Source

OxVALVE Study: community echo screening in ≥65 years

The OxVALVE Population Cohort Study enrolled 2,500 individuals aged ≥65 years from primary care in Oxfordshire, UK, and screened them for undiagnosed valvular heart disease (VHD) using transthoracic echocardiography. Newly identified VHD was detected in 51% of participants, and clinically significant (moderate or severe) VHD was newly diagnosed in 6.4%, bringing the total estimated population prevalence of significant VHD to 11.3%. The most common abnormalities were: aortic sclerosis (34%), mitral regurgitation (22%) and aortic regurgitation

(15%). Projecting these findings to the UK population, the study estimated the number of individuals aged ≥65 with significant VHD would rise from 1.5 million in 2015 to 3.3 million by 2056, with prevalence doubling before 2050, highlighting the urgent need for structured community-based screening.

Source

PAD Quality Improvement Framework (PAD-QIF)

The PAD Quality Improvement Framework is a national quality framework that standardises care for peripheral arterial disease (PAD) and chronic limb-threatening ischaemia, requiring early Ankle-Brachial Index (ABI) testing, clear referral timelines and a mandatory multidisciplinary review before any major amputation. The framework's integration into NHS health checks identified PAD in 12% of high-risk individuals and was linked to a 35% reduction in major amputations. The ABI test itself has a sensitivity of 80–95% and a specificity of 95–100% for detecting PAD, making it a highly reliable, non-invasive and cost-effective tool for population-level screening.

Source

Integrated Diabetic Foot & PAD pathway models combined with vascular screening

Integrating diabetic foot services across NHS regions combining early Peripheral artery disease (PAD detection) with rapid limb-salvage pathways consistently reduces major amputation rates. A systematic review found that 94% of multidisciplinary foot-care programmes successfully lowered major amputations, with the most effective models utilising routine ABI testing at diagnosis, fast-track vascular referrals within two weeks of identified ischaemia, and coordinated care between diabetologists, vascular surgeons, and podiatrists. Given that PAD prevalence reaches 16–29% in diabetic populations, early vascular screening remains critical to preventing limb loss.

Source

ABI-based PAD detection

Routine ABI testing in selected high-risk populations, particularly among older adults and individuals with diabetes, integrated into specialist and regional care pathways and supported by national vascular registry data, has allowed for earlier identification of previously undiagnosed PAD and earlier initiation of preventive therapies. Population-based studies have found low ABI prevalence of up to 29% in high-risk adults aged 50–69 with a history of smoking or diabetes, and in all adults aged ≥70. With its sensitivity of 80–95%, specificity of 95–100% and positive and negative predictive values exceeding 90%, the ABI is the most commonly used and most cost-effective non-invasive test for PAD detection in clinical practice, second only to duplex scanning in sensitivity.

Source

Opportunistic case finding programme embedded in a structured chronicdisease management pathway (Ireland)

In Ireland, opportunistic case finding was integrated into the Health Service Executive's (HSE) Chronic Disease Management (CDM) Treatment Programme in General Practice, targeting individuals with key risk factors such as smoking, elevated BMI, advanced age and prior gestational diabetes. Since its launch in 2020, the programme has reached over 400,000 patients with the support of 97% of GPs nationwide, and 91% of participants now receive routine chronic disease care within the community. Participants experienced 30% fewer emergency department attendances, 26% fewer hospital admissions and 33% fewer GP out-of-hours visits. Moreover, 51% of all new chronic disease diagnoses have been made through GPs within the programme, demonstrating the power of structured primary care to detect and manage cardiovascular and metabolic disease early, reducing reliance on hospital-based interventions.

Source

Early detection of heart failure through biomarkers

In Spain, the National Primary Care Portfolio included NT-proBNP testing as a routine diagnostic tool across all 17 autonomous communities to address the burden of undiagnosed and late-diagnosed heart failure, which had been contributing to delayed treatment and unnecessary hospitalisations. The implementation of NT-proBNP testing in primary care enabled early rule-out of heart failure and led to a reduction in echocardiography referrals by up to 40% and a 25% decrease in specialist cardiac clinic referrals, while halving diagnosis and treatment times and reducing hospitalisation and mortality rates for patients diagnosed in primary care by up to 50%.

Source

Identifying aortic stenosis through integrated screening

A pilot study integrated aortic stenosis (AS) screening into influenza vaccination campaigns in primary care in the United Kingdom, combining cardiac auscultation with 2D echocardiography to detect a condition that often remains undiagnosed until it reaches a severe stage. The programme identified heart murmurs in 18% of screened patients by echocardiography and referred 10% for further cardiac evaluation. Projections suggest the approach could identify an estimated 130,000 cases of moderate to severe AS in the country, validating the effectiveness of integrating cardiovascular screening into existing routine care contacts.

Source

Screening for cardiovascular risk in the general population – the SPICES implementation survey

As part of the EU-wide SPICES project, non-physician screeners – mainly health students, alongside pharmacists and nurses – used the Non-Laboratory Interheart Risk Score and a digital tool to assess cardiovascular disease (CVD) risk at public events across Belgium, France, Uganda, the United Kingdom and South Africa, screening 3,384 people over five months in response to CVD accounting for 32% of global deaths. Screening identified over 50% of participants at moderate to high CVD risk, proving this low-cost, community-based model can achieve broad coverage without straining systems. By preserving physician time and requiring minimal infrastructure, the approach offers a scalable, replicable solution for expanding preventive screening within limited budgets.

Source

Cost-effectiveness of population screening for atrial fibrillation: the STROKESTOP study

The STROKESTOP randomised trial in Sweden targeted 27,975 individuals aged 75–76 years to assess whether population-based screening for atrial fibrillation (AF) – a leading cause of stroke that often remains undiagnosed in older adults – could reduce long-term health and economic burden. After a median follow-up of 6.9 years, Markov modelling and probabilistic sensitivity analysis demonstrated that the screening approach was both cost-saving and health-enhancing, delivering 77 life-years and 65 Quality-Adjusted Life Years gained per 1,000 screened while reducing strokes and overall healthcare costs by €1.77 million. AF screening was cost-effective in 99% and cost-saving in 93% of scenarios, providing the first long-term, randomised evidence supporting AF screening as a dominant preventive strategy in ageing populations.

Source

Early detection of cardiovascular disease in high-risk populations in The Netherlands

The RED-CVD trial across 25 Dutch practices tested a low-cost screening approach for 1,216 adults with type 2 diabetes or COPD. Utilising nurse-led questionnaires, NT-proBNP testing, ECGs, and physical exams within existing chronic care, the strategy more than doubled cardiovascular disease detection within one year (8% vs 3%). This demonstrates a scalable, affordable method for early intervention without significant system burden

Source

Cost-saving potential of NT-proBNP for heart failure in Portuguese Primary Care

A budget impact study in Portugal evaluated the introduction of NT-proBNP testing – both laboratory-based and point-of-care – in primary care for a modelled population of 81,012 patients with suspected heart failure over a one-year horizon. The integration of NT-proBNP testing proved cost-saving by optimising resource allocation: laboratory-based testing led to a 26.8% reduction in echocardiograms compared to standard care, while budgetary savings reached 2.5% of the annual standard care budget for laboratory-based testing and 7.9% for point-of-care testing. The use of biomarker testing also significantly reduced the time to diagnosis and lowered the frequency of unnecessary medical visits and hospitalisations.

Source

Endnotes

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