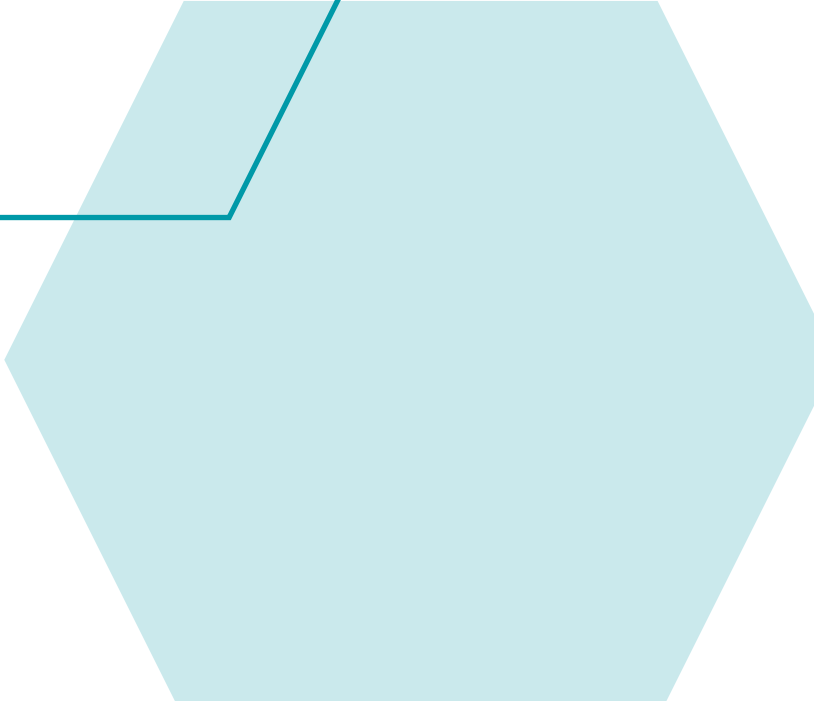


Cardiovascular Disease Burden in Europe

A Call to Action

2019 - 2024



Diseases of the heart and circulatory system are the leading cause of death in Europe and a major cause of disability. Cardiovascular diseases can impact people of all ages.

However, the risk of cardiovascular disease, which include heart failure, atrial fibrillation-related stroke, heart valve disease or coronary heart disease, increase with age.¹ In 2040, 155 million Europeans will be over 65.² As Europe's population continues ageing, incidence of cardiovascular diseases (CVDs) is set to increase dramatically.

Preventing, detecting and diagnosing these conditions early – and managing them efficiently when they occur – is essential to keeping workers, and citizens of all ages, out of hospital and in good health, while making efficient use of healthcare resources. This regardless of gender, income or country.



CVD is the number 1 killer globally, and the EU alone accounts for 1.8 million deaths every year or 36% of all deaths.³



CVD is still hugely linked to health inequalities, with more pre-CVD-related deaths in women than men, in middle-income than high-income countries, and pronounced declines in coronary mortality in countries with the most advanced contemporary care.¹⁹



CVD causes 46 times the number of deaths and 11 times the disease burden caused by AIDS, tuberculosis and malaria combined in Europe.⁴



CVD costs the EU 210 billion EUR per year, due to healthcare costs, productivity loss, and informal care by caregivers.⁵



What can the EU do?

Although Member States are responsible for the delivery of health and social care to patients, they face common challenges and would benefit from coordinated action at EU-level.

With a new EU institutional framework now starting for the period 2019 to 2024, the EU has a unique opportunity to put CVD at the top of its policy agenda. This will help to ensure that people can live longer, healthier lives – regardless of where they are born in the EU – and can continue to contribute to society.



Decision-makers can seize the 2019-2024 EU strategic agenda by immediately tackling the burden of CVD on 3 key fronts:



Better understand the impact and burden of CVD on

society: Create and maintain a European database mapping CVD across the EU. This will help governments and payers to make informed decisions, ensuring better value and care for patients, and foster the evolution of healthcare systems in a sustainable way. Most CVDs have better prognosis, higher treatment success, and lower social cost, if diagnosed and treated early. Facilitating access to comprehensive and regular checks can help to achieve this. Recent data from methodologically robust studies are needed to understand both the current epidemiology and the cost burdens of CVD for Europe and individual European countries.



Improve patients' quality of life and increase efficiency in both primary and tertiary care, through fast yet secure

access to innovation: Facilitate pilots to have efficient access to innovation in a secure manner, such as through Early Feasibility Studies in the framework of the new EU medical technology regulations. Also, ensure ongoing education for healthcare professionals and patients, addressing uncertainties regarding technologies' effectiveness and value within the specific health care setting. This will in turn lead to adoption of innovation and inclusion in the reimbursement system. Reward technologies for their impact on CVD progression and CVD management costs.



Reward technologies for the clinical and economic value, including outcomes, they bring to patients, hospitals and the healthcare system:

Promote and incentivize Innovative Payment Schemes, such as Coverage with Evidence Development, to foster early coverage of innovation, and help subsequent evaluation by relevant payers and authorities.



Did you know?

192,000 people younger than 65 die of CVD every year.⁷ Most of the factors contributing to CVD could be avoided. Shared knowledge and information can help to develop comprehensive responses.

In the US, the introduction of Early Feasibility Studies has increased access for patients to potentially beneficial technologies and to support device innovation.⁸

Recent studies, addressing the treatment of atrial fibrillation found that the use of innovative technologies had a 10x impact on disease progression reduction versus conventional treatments.¹⁶

In the UK, natriuretic peptides testing in primary care following NICE guidelines can reduce the number of echocardiograms and referrals by 50% and this could save NHS £3.8 million.¹¹

Who we are

The Cardiovascular Medical Technology Industry provides solutions to the burden of CVD on individuals, families and the wider economy. These innovations, which span the full spectrum of patient care from diagnosis to cure, save lives and add tremendous value to European society.

Our technologies are central to Europe's fight against CVDs and can be found everywhere: 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, and the minimally-invasive heart valve and stent procedures that improve clinical, procedural and patient outcomes, and reduce associated costs and recurrence.

We are a responsible industry committed to delivering solutions, but we believe the EU could leverage so much more benefit from medical technologies to tackle the burden of CVD. Through constructive, collaborative partnerships with patients, governments and payers, we can together go even further to help alleviate Europe's CVD burdens once and for all, for our fellow citizens and for society as a whole.

Our view on key challenges around CVD



Although CVD is the Number 1 killer in Europe, **understanding, awareness and attention to the causes and treatment of CVD** are lagging behind that of other diseases. Much information is already available, but this is not always connected, making it more difficult to have a thorough understanding of the disease pathway, the causes of individual CVDs, the population at risk, key comorbidities, and the appropriate responses required.



Many **citizens** rely on medical technologies to save their life or help them manage their disease, but they often lack the access that can provide the most benefit to them personally. Due to complex regulatory approval procedures, it can take several years before innovative and beneficial life-changing technologies become **lawfully available and effectively used in the products**. People suffering from CVD have a key role to play in treatment management decisions, guided by a multidisciplinary healthcare team approach, for informed decision-making and better outcomes than those derived from isolated pillars of care delivery.



Funding and reimbursement processes have grown increasingly complex and are under systemic pressure. With increasing demand for care, and ever-evolving technologies, authorities across Europe agree that technologies should be rewarded for the value and outcomes they bring. However, uptake of **common tools and a defined process to enable this is still lacking in many parts of the EU**.

For more information please visit
www.medtecheurope.org/cardiovascular

References

1. European Commission overview of Cardiovascular Diseases: <https://ec.europa.eu/research/health/index.cfm?pg=area&areaname=cardiovascular>
2. Eurostat (2017) People in the EU – population projections, http://ec.europa.eu/eurostat/statistics-explained/index.php?title=People_in_the_EU_-_population_projections
3. Eurostat (2019) Causes and occurrence of deaths in the EU, 16 July 2019: https://ec.europa.eu/eurostat/web/products-eurostat-news/product/-/asset_publisher/VWJkHuaYvLIN/content/DDN-20190716-1
4. European Commission, Health in the European Union – facts and figures: Cardiovascular diseases statistics
5. European Heart Network, Cardiovascular Disease Statistics 2017: <http://www.ehnheart.org/cvd-statistics/cvd-statistics-2017.html>
6. WHO Statistics on Cardiovascular: <http://www.euro.who.int/en/health-topics/noncommunicable-diseases/cardiovascular-diseases/data-and-statistics>
7. European Heart Network (2019), Manifesto for the EU elections <http://www.ehnheart.org/ehn-manifesto-for-the-european-elections-2019.html>
8. FDA EFS Program : <https://www.fda.gov/medical-devices/device-advice-investigational-device-exemption-ide/early-feasibility-studies-efs-program>
9. Eurostat Causes and occurrence of deaths in the EU, 16 July 2019: https://ec.europa.eu/eurostat/web/products-eurostat-news/product/-/asset_publisher/VWJkHuaYvLIN/content/DDN-20190716-1
10. European Heart Journal (2018) 0, 1–13 (doi:10.1093/eurheartj/ehy677)
11. British Heart Foundation, Focus on Heart Failure: 10 Recommendations to Improve Care and Transform Lives: <https://www.bhf.org.uk/-/media/files/campaigning/appg-on-heart-disease-focus-on-heart-failure-report.pdf>
12. Global Burden of Disease Collaborative Network (2016) Global Burden of Disease Study 2016: <http://ghdx.healthdata.org/gbd-results-tool>
13. Odutayo A, Wong CX, Hsiao AJ, Hopewell S, Altman DG et al. (2016) Atrial fibrillation and risks of cardiovascular disease, renal disease, and death: systematic review and meta-analysis. *Bmj* 354 i4482
14. Boriani G, Proietti M (2017) Atrial fibrillation prevention: an appraisal of current evidence. *Heart* (0):1–6
15. The Economist Intelligence Unit White Paper, Preventing a Stroke: Uneven Progress, A Global Policy Research Programme, 2017: https://perspectives.eiu.com/sites/default/files/Preventing%20Stroke_Uneven%20Progress.pdf
16. Aliot E, Breithardt G, Brugada J, Camm J, Lip GY et al. (2010) An international survey of physician and patient understanding, perception, and attitudes to atrial fibrillation and its contribution to cardiovascular disease morbidity and mortality. *Europace* 12 (5): 626-633.
17. Kuck KH, Lebedev, D., Mikaylov, E., Romanov, A., Geller, L., Kalejs, O., Neumann, T., Davtyan, K., On, Y.K., Popov, S., Ouyang, F. (2019) Catheter ablation delays progression of atrial fibrillation from paroxysmal to persistent atrial fibrillation. ESC Late-breaking Science 2019. Paris, France. August 31, 2019.
18. Biosense Webster (2018), The Burden of Atrial Fibrillation: Understanding the Impact of the New Millennium Epidemic across Europe: https://www.jnjmedicaldevices.com/sites/default/files/user_uploaded_assets/pdf_assets/2018-11/AF_Full_Report_DIGITAL_095102-2509.pdf
19. European Society of Cardiology, ESC Cardiovascular Realities 2019, p.70: <https://www.flipsnack.com/Escardio/esc-cardiovascular-realities-2019/full-view.html>



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