

CHRONIC DISEASES: SUSTAINABLE SOLUTIONS FOR EUROPE

POWERING UP CHRONIC DISEASE MANAGEMENT



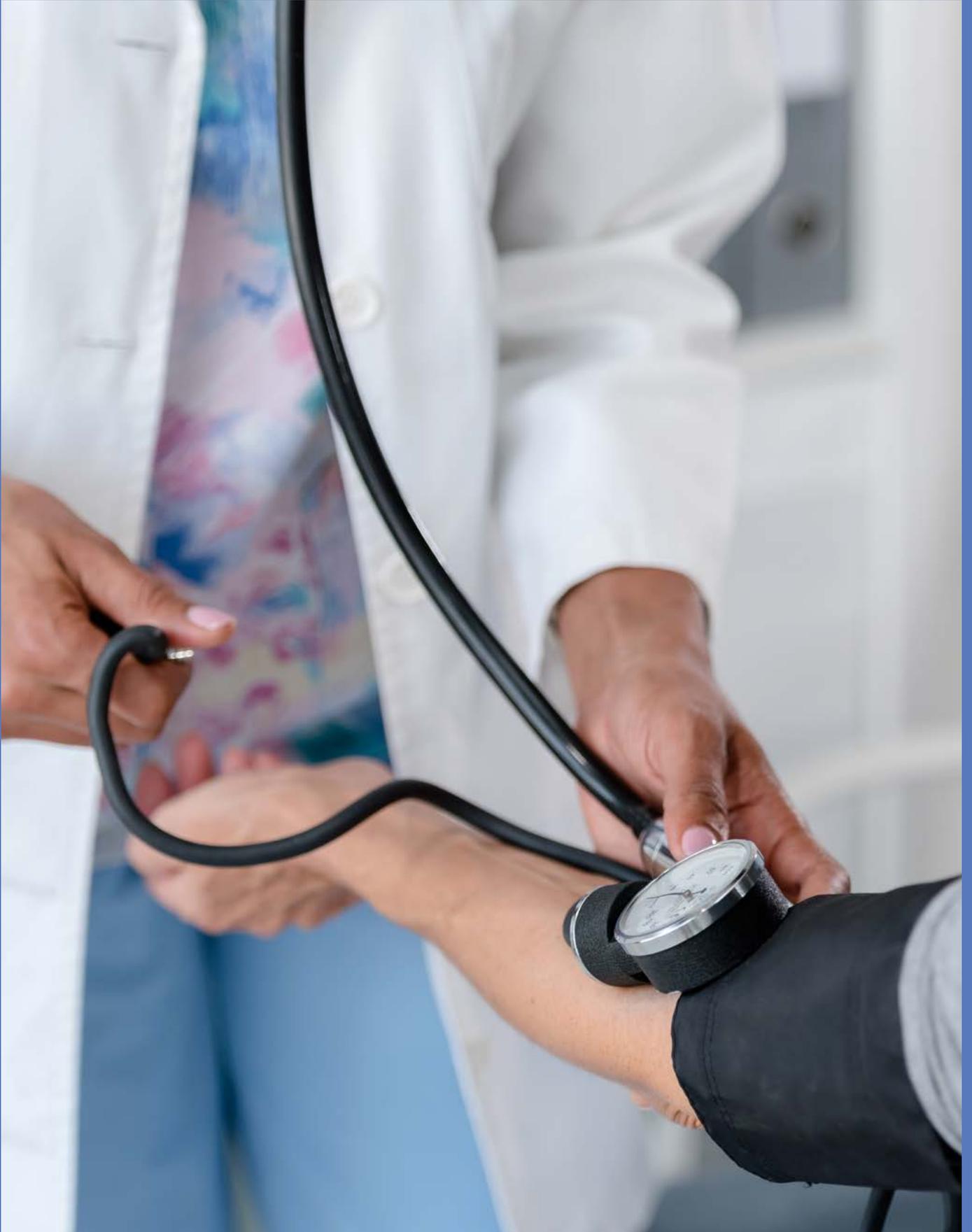
efpia*

European Federation of Pharmaceutical
Industries and Associations



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INTRODUCTION & BACKGROUND

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How to power up chronic disease management to safeguard health systems

Chronic and non-communicable diseases (NCDs), such as cardiovascular disease, cancer, diabetes, chronic kidney disease, mental health disorders, neurological diseases, obesity and respiratory diseases require long-term or life-long care. These conditions are the leading causes of death and disability across the globe. In the EU, they are responsible for 80% of the disease burden*. Chronic diseases are linked by several common risk factors and underlying determinants. This presents opportunities for effective intervention to change the disease trajectory toward a less severe course.



Europe is experiencing a demographic shift, with **the proportion of adults over 65 years of age significantly increasing in every EU Member State** due to increased longevity coupled with decreasing birth ratesⁱ. The shrinking working age population and increasing retirement age population adds pressure on health systems, healthcare professionals, and care providers.

Increases in life expectancy do not necessarily equate to extra healthy life years (or disability-free life years). For example, women in the EU who reached the age of 65 in 2020 could expect to live another 21 years. However, less than half of these years would be free of activity limitationsⁱⁱ. Equally, the healthcare workforce is under added pressure with fewer professionals per patient, on top of the existing shortages of doctors and nurses that exist in many EU countries.



The chronic disease challenge does not begin in later life. **One-quarter of the working age population has a chronic disease**. Premature death from chronic diseases in the working age population is responsible for €115 billion in economic loss every year in the EUⁱⁱⁱ. Equally worrying is the finding that in 2020, 36% of EU adults over 65 years of age were living with at least two chronic diseases and the burden of chronic disease is growing faster in the last decade^{iv}.



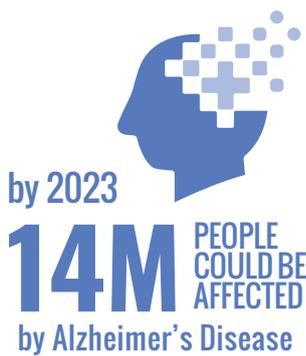
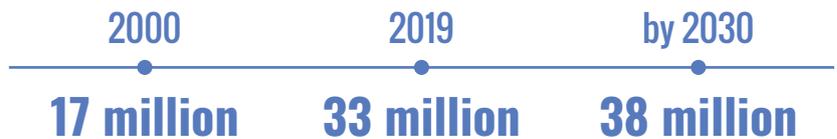
Obesity is predicted to affect **35% of all women and 39% of all men by 2035**.

The economic impact of high BMI is predicted to rise above €745 billion annually by 2035 (at 2019 prices), equivalent to 2.6% of the European region's GDP at the time^v.

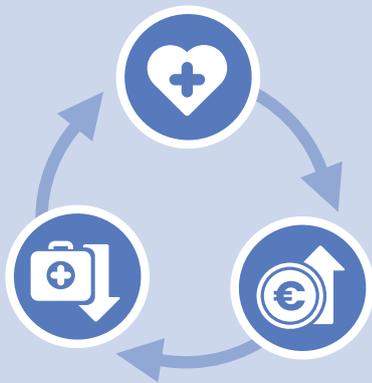
The leading causes of premature death in Europe are cardiovascular disease and cancer^{vi}. It is evident that on top of health system pressure to accommodate retirement-age people with chronic diseases, the integrity of the workforce, the tax base, and the welfare system to which they contribute are at risk.



The number of adults diagnosed with diabetes in the EU has almost doubled over the last two decades, **from about 17 million in 2000 to 33 million in 2019, and is projected to increase to 38 million by 2030^{vii}.**

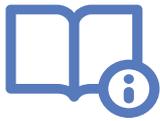


In Europe, Alzheimer's Disease and other forms of dementia affect **around 10 million people, and this is expected to increase to 14 million by 2030** due to the ageing population^{viii}. The total economic burden of Alzheimer's is anticipated to increase to EUR 633 billion by 2050^{ix}.



Health and prosperity are inextricably linked. Healthier people enjoy longer and more productive working lives – contributing to the economy while consuming less health and social care. Smart healthcare spending and investment builds the foundations for stronger and more sustainable economic growth, which in turn supports better healthcare provision. This 'virtuous circle' will help to solve the challenge posed by societal ageing and other long-term threats to the sustainability of our health systems and social model.

In the aftermath of the COVID-19 pandemic, the need for improved resilience in times of crises is clear – in terms of population health, workforce resilience, and health systems strengthening. A shift is needed from reactive acute care in hospital settings, to proactive, preventative, long-term, person-centred and integrated care to adapt to the current population health dynamics. This health system modernisation is needed to drive sustainability in care provision and build back better from the COVID-19 crisis.



FURTHER READING:

- * [Health Systems after COVID-19](#)
- * [Power Up Health Systems](#)





We know that health systems also face long-term threats from antimicrobial resistance, environmental risks, and climate change. Because of this, it is essential to lay the foundation for a healthier population, by tackling NCDs such as cardiovascular disease, cancer, diabetes, chronic kidney disease and Alzheimer’s Disease early in the disease process, and with personalised interventions. This has the potential to shift the disease trajectory toward milder illness with less severe outcomes, and less need for costly late-stage interventions. This is how we become a European-wide community more resilient to emerging health threats, while creating fiscal space in our health budgets.



€210 billion
a year

In 2015, the EU economy **lost €210 billion to cardiovascular diseases**; of which **€111 billion (53%) was in health care costs**, **€54 billion (26%) in productivity losses**, and **€45 billion (21%) was in the costs of informal care of people with cardiovascular diseases^{xiii}**.



FURTHER READING:

* [Strengthening health systems through smart spending](#)

READ MORE ABOUT:

- * the [EFPIA Alzheimer’s Disease Platform](#)
- * the [EFPIA Cardiovascular Health Platform](#)
- * the [EFPIA Diabetes Platform](#)
- * the [EFPIA Oncology Platform](#)



SOLUTIONS

EFPIA's vision is that people living with NCDs achieve the best possible health outcomes and quality of life. Timely and effective prevention and health care interventions, accessible to all, can reduce complications and premature deaths, as well as unnecessary costs for health systems and society.

2

I. PRIMARY PREVENTION

Prevention can be a powerful tool to reduce the incidence of many types of NCDs. A large proportion of NCDs are preventable and driven by modifiable risk factors including tobacco use, unhealthy diet, physical inactivity, harmful use of alcohol, and air pollution^{xiv}. In 2019, over 1 million premature deaths across EU countries could have been avoided through better prevention or timely treatment. Heart disease and cancers are the leading causes of these avoidable deaths^{xv}. Prevention should be at the heart of any comprehensive NCD strategy. However, it is important to acknowledge that the benefits of primary prevention accrue over a lengthy time horizon. We need a combined strategy that implements actions to prevent future burden while also intervening in existing diseases and risk factors now to mitigate severe morbidity^{xvi}.

Countries have at their disposal several comprehensive policy options to tackle these risk factors, ranging from health promotion and education to regulation. For example, the EU Farm to Fork Strategy and Europe's Beating Cancer Plan call for revising EU rules on information provided to consumers.

Primary prevention of acute infectious diseases through vaccination programmes not only prevents the acute disease itself, but also helps to avoid long-term consequences such as resulting co-morbidities and ill health, reducing the incidence of chronic disease complications such as diabetes, respiratory illness and heart failure.

Improving health literacy and e-health literacy is crucial for disease prevention, early detection, and better management of chronic diseases through self-care and medication adherence. Limited health literacy is linked to risky health choices, diminished disease management, and increased hospitalisation and mortality rates. Therefore, healthcare systems should invest in digital health tools and platforms to empower patients, carers, and the public, particularly vulnerable groups with lower (e)-health literacy, to participate in their healthcare. Trusted communication channels should be established to listen to patients' experiences and shape services for better outcomes.

“ People need to be able to critically appraise information, and then apply their understanding in daily life.

This is how we fight a global pandemic, and any other disease, really. People need to feel like they are part of the solution, and that their behaviours are the key for better health.”

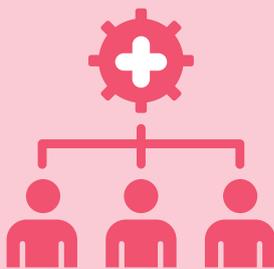
Professor Thomas Abel, Institute of Social and Preventive Medicine, Bern, Switzerland^{xvii}.

II. SECONDARY PREVENTION

The main treatable causes of mortality include ischaemic heart disease, colorectal cancer, breast cancer and stroke^{xviii}. Together, these accounted for nearly 60% of all deaths in 2017 that could be avoided through the provision of timely and effective treatment. For example, mortality can be significantly reduced through the management of metabolic risk factors (hypertension, high cholesterol, diabetes, obesity) to prevent secondary cardiovascular events.

Early detection, diagnosis and treatment of NCDs are critical to reduce the risk of complications, comorbidities and death. However, many people remain undiagnosed or endure long wait times to receive treatment. For example, up to one third of all people living with diabetes in the EU are currently unaware of their condition and there can be a delay of up to 6 years between the appearance of the first symptoms and diabetes diagnosis^{xix,xx,xxi}. Furthermore, people with diabetes can wait for up to 5 years to receive appropriate treatment^{xxii}.

It is estimated that the UK National Health Service (NHS) would save £68 billion in the next 25 years (fully cost saving at 10 years) if all individuals with 6 high cardiovascular risk conditions were diagnosed and treated. Most of these savings would come from preventing cardiovascular and microvascular complications of diabetes^{xxiii}. Similarly for cancer, stage at diagnosis is a critical predictor of cost. For example, in Belgium, treatment over one year for stage III breast cancer (€29,149) is over three times more costly than for the earliest stage of breast cancer (€8,526)^{xxiv}. Unfortunately, people with NCDs experience significant delays in diagnosis and treatment, and health systems are still grappling with the backlog of cancer screenings – which grew significantly during the COVID-19 outbreak. An estimated one million cancer cases were missed in Europe due to the pandemic^{xxv}.



Stakeholders in the diabetes and cardiovascular communities are calling for joint and targeted health checks to be carried out at primary care level, assessing a set of shared risk factors, to prevent complications and save downstream costs.

Read more [here](#).



Healthcare systems in Europe currently lack the capacity to detect, diagnose and treat Alzheimer’s Disease effectively, hindering the ability to rapidly move a disease-modifying therapy from approval into widespread clinical use. This could leave many patients without access to transformative care when a breakthrough occurs.

Read recommendations from the EFPIA Alzheimer’s Disease Platform [here](#).

III. INVESTING IN PRIMARY CARE



Primary care is often the first point of contact people and patients have with the health system. It involves a wide range of services and professionals, including general practitioners (GPs), nurses and pharmacists. Investing in primary care can improve outcomes for those living with chronic diseases and save costs for health systems, by facilitating early diagnosis, providing person-centred care that addresses comorbidities, and helping to reduce health inequalities.

Access to continuous and regular primary care can reduce the number of emergency department visits and hospitalisations, and shortens the length of hospital stays^{XXVI, XXVII, XXVIII, XXIX}.

Integrated care is a delivery model in which primary, community and specialist services collaborate in the provision of best-practice care adapted to the needs of the patient. Inadequate integration leads to inefficiencies and missed opportunities to improve health outcomes. By bringing these elements together, people living with chronic diseases stand to benefit from a more holistic approach to care pathways, offering seamless disease management and follow-up.

Short-term budgetary cycles are ill-suited to the management of chronic diseases. It is time to rethink budgets to ensure that incentives are designed to maximise outcomes. By breaking down siloes and taking a person-focused approach, health systems can improve the lives of people with chronic diseases, build system resilience and deliver efficiencies.



Strengthening primary care:

In Belgium, the Diabetes Project Aalst provides chronic disease management in a primary care setting. It focuses on establishing integrated care teams, including diabetes educators, that help patients manage their conditions. The project, which has seen the participation of 69% of the general practitioners in the Aalst region, has led to a significant improvement in patient outcomes within a short period^{XXX}.

IV. TIMELY ACCESS TO INNOVATION

Health systems have a long-term sustainability problem. This is primarily driven by ageing populations, the burden of chronic disease and multi-morbidity (according to OECD, the segment of healthcare that has been growing fastest in recent years is long-term care) and the shock from pandemics. However, pharmaceutical expenditure has been stable as a share of total healthcare expenditure in all European countries included in research by IQVIA for the last 20 years, converging at around 15% of total healthcare expenditure^{xxxI}.

For many chronic conditions, such as diabetes and cardiovascular disease, the cost of medicines is a very small part of the overall cost of the disease, especially if broader societal costs are considered. Additionally, proper use of medicines prevents these costs from being even higher by reducing unnecessary emergency visits, hospitalisation and complications^{xxxIII}.



10%

In Italy, innovative diabetes medicines launched in the past five years account for 1.2% of the total cost of managing the disease. The combined cost of all diabetes medicines represents just **10% of the total cost of diabetes care**. Life-saving insulin and preventative treatments save healthcare systems further costs by avoiding expensive treatment of diabetic complications and co-morbidities, as well as the informal care and productivity losses associated with the condition^{xxxIII}.

Pharmaceutical innovation has a key role to play in addressing unmet health and patient needs. Continued investment in Research & Development requires strong and predictable incentives for innovation in Europe, including a competitive intellectual property framework, a future-proof and effective regulatory system, and a value-based approach to pricing and reimbursement applied by payers and HTA bodies. In 2016, a subset of innovative biopharmaceuticals for HIV and breast cancer alone were associated with over 2 million additional healthy life years in Europe, which led to **savings of €13 billion in healthcare and €27 billion in extra productivity**^{xxxIV}.

Avoidable hospital admissions from chronic diseases, such as chronic heart failure, chronic obstructive pulmonary disease (COPD), or diabetes, consume over 37 million bed days each year^{xxxv}. Inadequate management of these diseases, (for example, non-adherence to treatment) can lead to exacerbations, unplanned outpatient visits and hospital admissions.

Over 40% of all patients on lipid-lowering treatment, and over 60% in the high-risk category, are not achieving their treatment goals. There is clearly work to be done on encouraging and improving adherence^{xxxvi}.

Disease management programmes and structured treatment plans, aiming to help patients better self-manage their condition, contribute to increasing overall healthcare efficiency by reducing complications and costs.



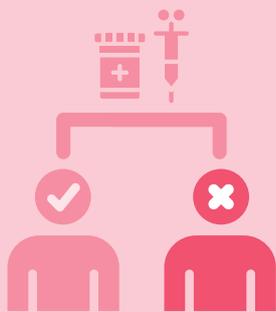


6.5%

Only **6.5%** of people with diabetes meet their treatment targets for glucose, blood pressure and cholesterol, leading to increased complications and deterioration of well-being, productivity losses and costs^{xxxvii}.

Therapeutic inertia is a term coined to describe the lack of timely adjustment of treatment to meet therapeutic targets. Improved adherence to the current scientific treatment guidelines would accelerate the delivery of innovative solutions to patients. In the case of diabetes, a number of local policy barriers and policy recommendations are identified in a report conducted with PwC, read more [here](#)^{xxxviii}.

NCDs disproportionately affect the least well off in society. Education is the main determinant of the average number of NCDs a person has, and of socioeconomic inequalities in NCDs^{xxxix}. In Italy, the least educated men have a 21% higher risk of cardiovascular disease compared with the most educated men; the least educated women have a 41% higher risk^{xl}. Wealth is also a differentiator since it is a significant predictor of the use of health care services^{xli}. Socioeconomic status is a known risk factor for excess cardiovascular death^{xlii}. It is vital to address disparities in the diagnosis of chronic diseases and access to health care services and innovative treatments across society. Read more about EFPIA's proposals to improve access [here](#).



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Around half of all patients do not take their treatment as prescribed.

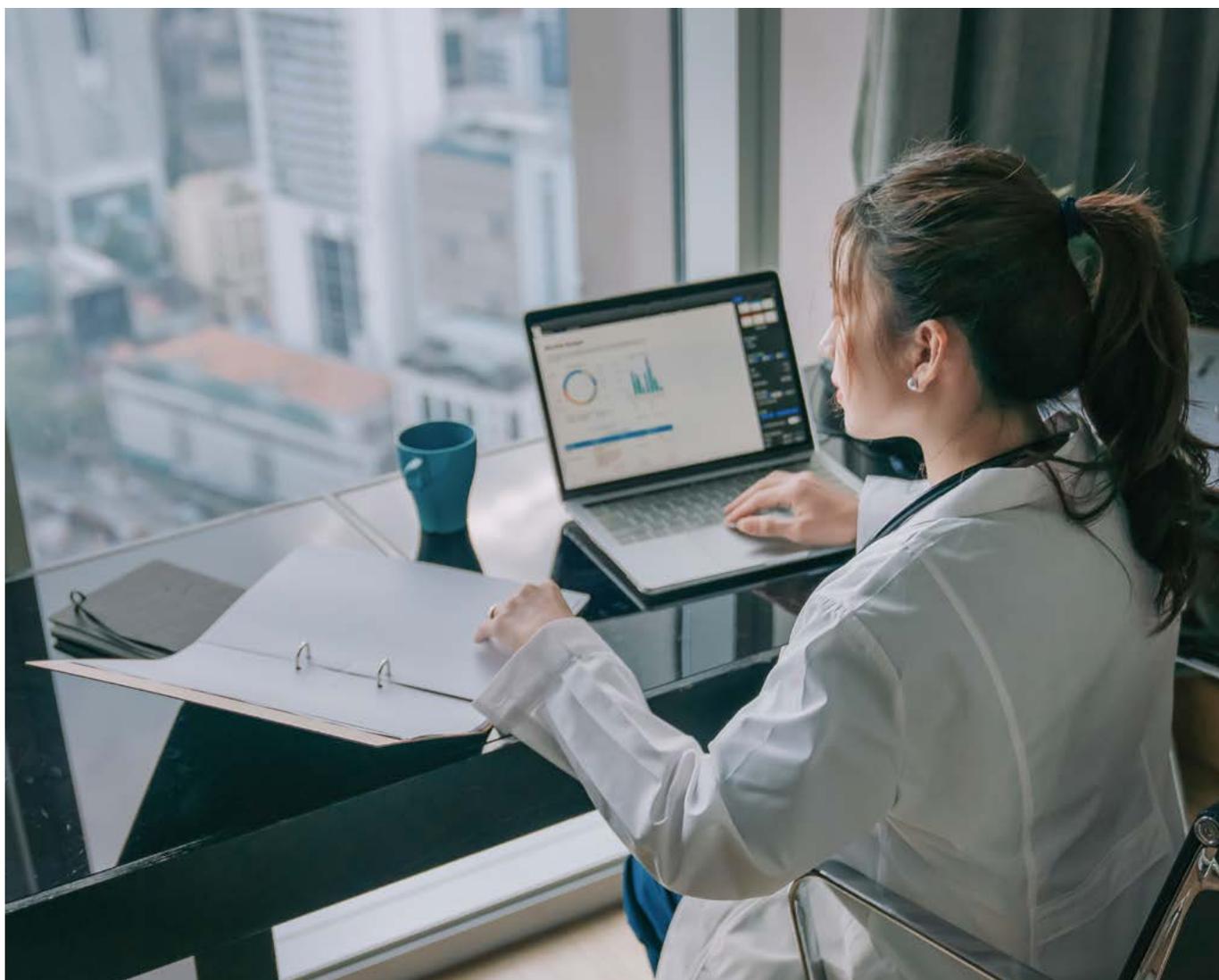
This 'non-adherence' to treatment can have a dramatic impact on patients' health and quality of life, resulting in avoidable hospitalisations and contributing to an estimated 200 000 deaths as well as €125 billion avoidable healthcare costs in the EU each year. The IMI Beamer Project is investigating a disease-agnostic model that segments the population based on actionable factors and predicts adherence behaviour to help build digital health solutions and promote better outcomes for all.

Read more [here](#).

V. DATA

Data & digital capacities in the field of NCDs need to be fully leveraged e.g., through region-wide registries to monitor outcomes and collect data on interventions in a meaningful way. To reduce the risk of complications and mortality, healthcare systems must use health data and registries to define, measure and achieve the best possible outcomes for people living with chronic diseases. Better use of data and digital tools will help identify the right patients for the right interventions and provide better data for research and development of innovative treatments. Read more about digital health [here](#).

The [European Health Data Space \(EHDS\)](#) is a key pillar of the European Health Union, aiming to better prevent, diagnose and treat diseases, through increasing digital access and control of electronic personal health data.



VI. WORKING IN PARTNERSHIPS

Achieving impact on NCDs requires a close collaboration between policy makers, healthcare systems, patient organisations, healthcare professionals, academia, and industry to advocate as a united stakeholder front.

EFPIA is partnering with key stakeholders to co-create recommendations for health policies. For example, through working with:

- * [The European Alliance for Cardiovascular Health](#)
- * [European Brain Council](#)
- * [European Diabetes Forum](#)
- * [The EU Health Coalition](#)
- * [The European Alliance for Value in Health](#)
- * [Cancer Pulse \(europeancancer.org\)](#)

The perspectives of patients, and their families and carers, are critical in identifying service needs and ensuring that chronic diseases are addressed appropriately. Patients living with chronic diseases often have day-to-day responsibility for managing their disease. They, together with their families, must be shared decision makers in their healthcare journey, with management centred around the person, home, and community. Partnering with patient experts, representatives, and patient organisations can offer invaluable insights into modernising, integrating and improving the healthcare system, so that it better meets people's needs, and that resources are targeted cost-effectively.

Public private partnerships that help pool resources to co-create, share value, and improve population health outcomes at scale such as through the Innovative Medicine's Initiative (IMI) and the Innovative Health Initiative (IHI) can help address the burden of NCDs, overcome treatment bottlenecks, and positively influence population health.



**Big Data for
Better Outcomes**

Big data for better outcomes (BD4BO):

Institutions across Europe house rich databases with detailed personal and biological information. If linked, this 'big data' has the potential to deliver insights that will allow healthcare systems to ensure that the patient is truly at the centre of decision making. IMI's Big Data for Better Outcomes (BD4BO) programme is generating knowledge, data and methodologies needed to support the transition towards more outcomes-focused, sustainable healthcare systems in Europe. Through its projects, the programme focuses on several key therapeutic areas, namely Alzheimer's Disease, heart disease, and certain cancers.



CONCLUSIONS

3

Any strategy to build more resilient health systems, boost economic stability, and reduce mortality and morbidity must address NCDs as a root cause of the stress on our health systems and productivity losses in our workforces.

Comprehensive strategies are needed at national level to combat the rise in major chronic diseases and to improve the lives of those already living with NCDs, taking account of local sociocultural, economic and political contexts.

Recommendations within national and regional disease action plans should embrace the solutions proposed above: prevention, secondary prevention, investing in primary care, accelerating innovation and optimising disease management pathways, digitalisation, and working in partnerships.

The EU institutions should encourage and help Member States to develop, implement and monitor national strategies with comparable milestones and targets through initiatives such as the *Healthier Together – EU NCDs Initiative* and funding programmes such as through EU4Health ([see annex for a list of recent initiatives](#)).

Continued R&D into new and innovative solutions to better diagnose, prevent, manage, treat and even cure chronic diseases is also key to meet this increasing challenge. Besides the rare scientific breakthroughs that completely change the treatment paradigm, incremental and patient-centred innovation is very important for the continued improvement of chronic disease care and management. For example, advances that lead to reduced side-effects or an easier mode of administration can positively impact patients' quality of life, adherence and overall outcomes.



FURTHER READING:

- * Assessing person-centred therapeutic innovations (IQVIA, 2019)^{xiii}.
- * Unmet medical needs, <https://efpia.eu/about-medicines/development-of-medicines/unmet-medical-need/>





ANNEX

Examples of recent initiatives at EU level on chronic diseases

4

Several EU policy initiatives have recently demonstrated increased prioritisation of NCDs at the political level:

- * The “[Healthier Together – EU Non-Communicable Diseases Initiative](#)” covers the period 2022-2027 and aims to support EU countries in identifying and implementing effective policies and actions to reduce the burden of major chronic diseases and improve citizens’ health and well-being.

It includes five strands: a horizontal strand on shared health determinants, focusing on population-level health promotion and disease prevention of chronic diseases (complementing the actions of Europe’s Beating Cancer Plan); and four disease-specific strands on diabetes; cardiovascular diseases; chronic respiratory diseases; and mental health and neurological disorders.

The Initiative aims to help countries achieve the United Nations Sustainable Development Goal Target 3.4, to reduce premature mortality from NCDs by one third by 2030 and promote mental health and well-being.

Through a consultation approach with stakeholders, a [guidance document](#) was co-created to guide policies and provide a basis for implementation of actions over the coming years. The document is therefore a toolkit to coordinate action on chronic diseases, and to identify and create windows of opportunity for high-impact actions to be implemented across countries. This is an ‘open document’, as the European Commission intends to update and complement it regularly with additional references.

Read a summary of EFPIA’s Diabetes Platform response to the consultation [here](#) and from the EFPIA Cardiovascular Health Platform [here](#)

- * The EU4Health programme includes [Joint Actions and projects on diabetes and cardiovascular diseases](#). The total available budget for the calls for proposals on cardiovascular disease and diabetes is EUR 5 million and can support, for example, health communication and campaigns to increase awareness and health literacy on primary and secondary prevention of cardiovascular disease and diabetes.
- * The European Parliament in March 2023 established a [Sub-Committee on Public Health](#) (SANT) within the Committee on the Environment, Public Health and Food Safety (ENVI) to focus on, among others, communicable and non-communicable diseases and will work on an own-initiative report (INI) on NCDs. The sub-committee will not have any legislative powers but will provide space for discussion on the topics of public health and health systems, following the COVID-19 pandemic.

- ✱ The European Commission has established an [Expert Group on Public Health](#) which advises the Commission on policy developments and transfer of best practices related to major public health challenges, including both non-communicable disease (e.g., diabetes, cardiovascular diseases) as well as communicable diseases (e.g., HIV/AIDS, tuberculosis and hepatitis, vaccination and antimicrobial resistance) in order to protect and improve the health of EU citizens.
- ✱ The European Commission's [Best Practice Portal](#) is designed to help find reliable and practical information on implemented practices recognised as the best in the area of health promotion, disease prevention, and the management of non-communicable diseases. It also provides an overview of practices collected and transmitted in actions co-funded under the EU Health Programmes.
- ✱ [Europe's Beating Cancer Plan](#) was published by the European Commission in 2021, with the aim to tackle the entire disease pathway. It features several flagship initiatives such as revising the Council Recommendation on cancer screening. An implementation roadmap can be accessed [here](#). In February 2022, the Parliament, led by the work of the [Special Committee on Beating Cancer](#), adopted its final recommendations for a comprehensive and coordinated EU strategy to fight cancer focusing on: Cancer prevention; Equal access to cancer care across borders, and; A European approach addressing medicine shortages.
- ✱ [EU Mission: Cancer](#) with the aim to foster research and save the lives of 3 million people by 2030, it is deploying a portfolio of activities in research and development.
- ✱ Commission President Ursula von der Leyen announced a new initiative on mental health, to be presented in 2023, in her [State of the European Union speech](#) in September 2022.
- ✱ In November 2022, 100 years after the discovery of insulin, the European Parliament adopted a landmark [Motion for Resolution](#) on prevention, management and better care of diabetes in the EU. It is an important step forward towards reversing the rising number of people living with diabetes, improving the management of diabetes and its complications, and addressing the inequalities and disparities in access to care and treatment in Europe.

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