From Cure to Care

How Longevity Strengthens Public Health and the Economy

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Foreword

We spend hundreds of billions of Swedish kronor on health-care – yet almost nothing on keeping people healthy

One frequently reads testimonials from people who have been seriously ill and treated within the Swedish healthcare system. A recurring theme in these accounts is that any doubts that may have existed beforehand are completely dispelled. Swedish healthcare works fantastically, is the usual conclusion.

Whether it does or not is difficult to measure. If you happen to be treated in the right place for the right condition, you will often receive highly professional care. In certain fields of medicine, some Swedish clinics rank among the very best in the European Union. Yet in other areas, Sweden is far from the best, despite being among those that allocate the largest share of public resources to healthcare.

To avoid placing undue or unnecessary strain on the healthcare system, many people – particularly from within the profession itself – argue that young people seeking health for minor colds, anxious first-time parents with crying babies, lonely older people, and healthy individuals who simply wish to improve their wellbeing should be discouraged from seeking care. Healthcare should simply be made difficult to access. These individuals are also often opposed to digital services, on the grounds that they increase accessibility. Unsurprisingly, a recurring criticism from patients is that it is difficult to know where to turn and hard to get through to the right services. Many people simply do not really know where to turn, and a family doctor is just a word to most people, not something that many actually have in reality.

Many people working in healthcare are also sceptical of preventive work. It is not considered “real” care. Taking tests on healthy individuals is dismissed as unnecessary, on the grounds that it may cause unwarranted anxiety and lead people to “burden the real healthcare system” with further questions and demands.

However, the only way to improve public health is not to simply treat people once they are already ill. It is also about giving people the opportunity to remain healthy for as long as possible. Many of the diseases we develop are extremely closely linked to what we eat, how we move, how we sleep and how we live. In modern society where healthcare is almost entirely tax-funded, a stronger emphasis on prevention ought therefore to be given. Yet the opposite is often the case. Preventive initiatives are largely organized privately and require both knowledge and significant personal commitment to access. Moreover, they are often questioned by mainstream health-care.

Preventive work within traditional healthcare mostly becomes a discussion about whether doctors should say anything at all about the importance of maintaining a healthy weight or being physically active to their patients.

This report seeks to explore how resources might be shifted from treating illness to enabling people to remain healthy for longer. In countries with insurance-based systems, there is a built-in incentive to support preventive work, since it is far cheaper to keep people healthy than to treat diseases. But in Sweden, we have a publicly organized and funded system that provides highly specialized care once you become seriously ill. There are no real interests driving development in another direction, despite an overwhelming body of research showing that almost all of our common conditions, such as cardiovascular disease, joint disorders, cancer, and high blood pressure, are strongly linked to lifestyle. Given that healthcare costs us close to 693 billion Swedish kronor annually according to Statistics Sweden's calculations, there ought to be, if nothing else, an economic interest in trying to find the best ways to help everyone remain healthy a little longer.

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Summary

The report outlines how Swedish healthcare needs to transition from treating disease to preventing it to a much greater extent.

Demographics and Health:

Life expectancy in Sweden has increased steadily – to 82 years for men and 85 years for women – but the number of healthy life years has leveled off. The World Health Organization estimates that, on average, we spend the last ten years of our lives in declining health. An ageing population therefore requires a stronger focus on prevention in order to reduce pressure on the healthcare system.

Costs and Resource Allocation:

Healthcare expenditures amount to 11 per cent of GDP (approximately 693 billion Swedish kronor), but only 3 per cent of total healthcare spending goes to preventive care. At the same time, lifestyle-related diseases – such as cardiovascular disease, diabetes, and obesity – account for up to 80 per cent of the healthcare burden. Studies show that every Swedish krona invested in prevention can generate multiple times that amount in socioeconomic savings.

Examples From Healthcare:

Swedish public healthcare continues to struggle with integrating preventive diagnostics, partly due to bureaucratic constraints and a persistent focus on treatment rather than underlying causes. Private actors such as Werlabs, Neko Health, and FunMed, on the other hand, have succeeded in identifying thousands of cases of prediabetes and other risk factors through early screening. Pilot projects such as health impact bonds in Region Stockholm and Uppsala also demonstrate promising results, where investments in lifestyle interventions reduce the risk of diabetes and high blood pressure while delivering substantial savings.

Ageing and Research:

The report highlights the growing body of research on biological ageing and the possibility of slowing the ageing process. Researchers such as David Sinclair and the Swedish scientist Sara Hägg demonstrate that physical activity, diet, and early diagnostics can influence biological age. Research on DNA repair and stem cells is also expanding rapidly.

Sweden as a Longevity Nation

Sweden has strong foundations – a world-leading life science industry, a high level of research expertise and strong willingness to pay among citizens – but a regulatory framework that currently constrains innovation. If regulations are modernised and private capital is encouraged, Sweden could become a leader in the longevity sector, a global market whose total revenues are expected to reach approximately 73 trillion Swedish kronor by 2030.

The report argues for a Swedish health and healthcare system that rewards preventive health, integrates new technology and diagnostics, and collaborates with private initiatives. Such a shift would not only improve public health but also free up significant socioeconomic resources.

From Healthcare to Health Care

How Longevity Strengthens Public Health and the Economy

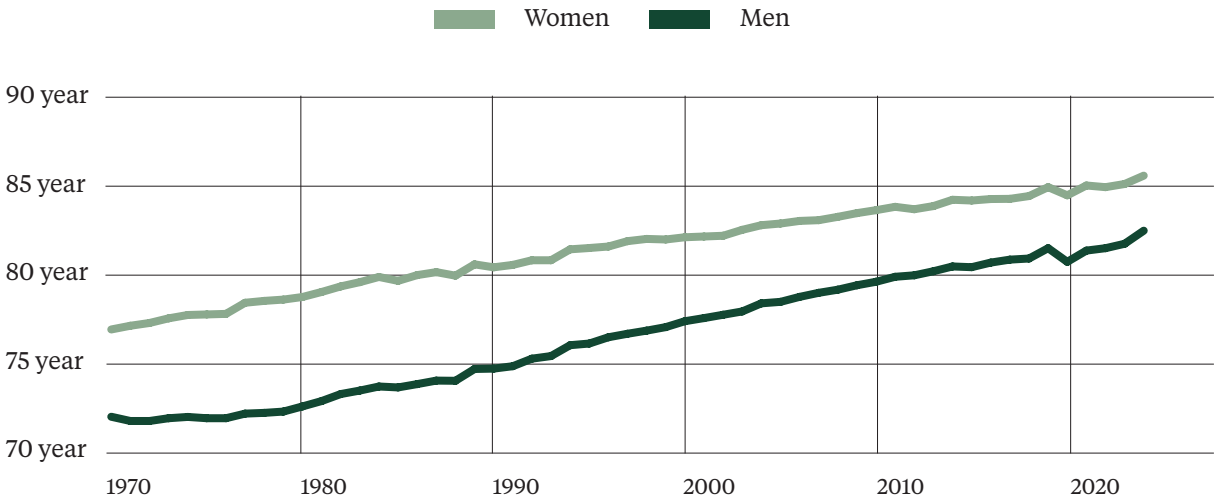
The term *longevity* refers to a long and healthy life. In recent years, the concept has become increasingly trendy within science. There is a growing interest in understanding why some individuals live longer and enjoy healthier lives than others.

As life expectancy increases and birth rates decline, it becomes increasingly important to focus on preventive healthcare. The single greatest risk factor for developing chronic disease is ageing. The World Health Organization states that by 2050, the share of the world's population over the age of 60 is estimated to increase to 22 per cent, almost a doubling from 2015, when the corresponding figure was 12 per cent (World Health Organization, 2025). At the same time as this development is taking place, the prevalence of lifestyle-related diseases such as obesity and type 2 diabetes is increasing both in Sweden and globally. In 2024, the Swedish National Board of Health and Welfare reported that the most common cause of death in Sweden is diseases of the circulatory system, that is, cardiovascular diseases (The National Board of Health and Welfare, 2024). In many cases, it is possible to prevent and slow progression of such diseases through lifestyle interventions, for example by changing diet and physical activity – measures that can prevent a great deal of suffering and save society substantial costs. To ensure that this demographic change does not lead to an overburdening of the healthcare system, Swedish healthcare must transition toward rewarding preventive measures. An ageing population must go hand in hand with healthy ageing.

Life Expectancy and Healthy Life Years

Over the past century, life expectancy has increased. People are living longer, and as a result we have an ageing population. In 1970, life expectancy among men was 72 years. Since then, it has increased to 82 years, and among women it has risen from 77 to 85 years (Statistics Sweden, 2025c). Although this is often used as a general measure of public health, it should not be confused with the number of healthy life years. Healthy life years (or healthy life expectancy, HALE) refers to the period of life during which a person can live without major health problems or activity limitations, in other words, without significant functional impairment. The foundation

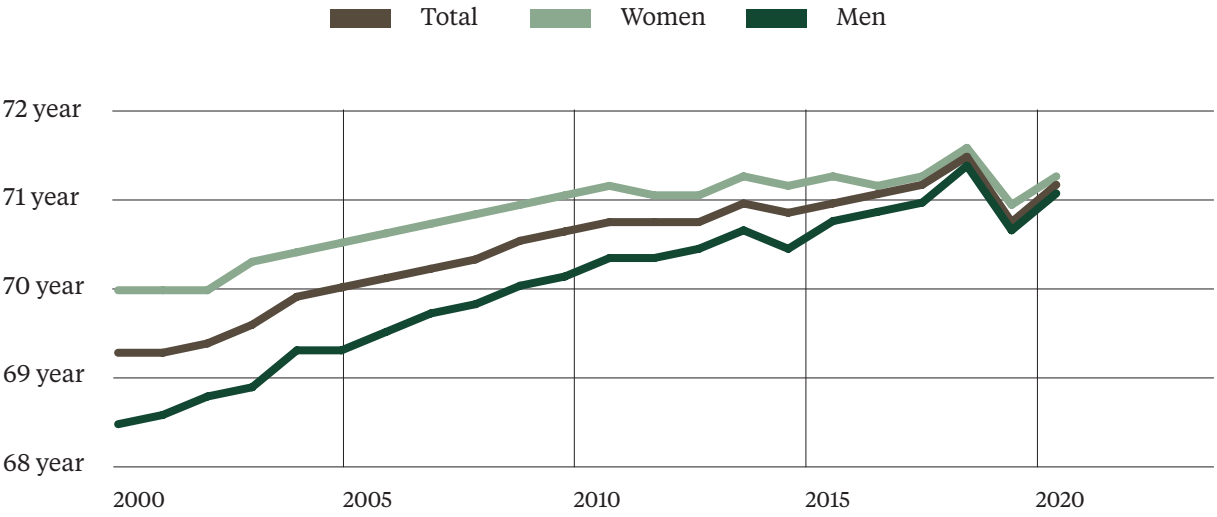
Figure 1: Average Life Expectancy per Year, 1970–2024.
Source: Statistics Sweden (2025c)



for living more healthy years is laid early in life and is based on good lifestyle habits such as regular physical activity, a healthy diet, and avoiding smoking and excessive alcohol consumption.

Since the turn of the millennium, the expected number of healthy life years has increased by almost two years on average, as illustrated in Figure 2. According to the World Health Organization's latest estimates from 2021, the average number of healthy years for a Swedish woman was 71.2 years, and 71 years for Swedish men (World Health Organization, 2024b). In other words, individuals are expected to spend approximately the last ten years of their lives in deteriorating health. Looking across Europe, the WHO estimates that populations in Luxembourg, Iceland, Norway, and Switzerland are expected to remain healthy for marginally longer than Swedes (World Health Organization, 2024a). One noteworthy observation is that gender differences in Sweden have decreased more in per centage terms when measuring healthy life years than when measuring life expectancy. This indicates that men tend to live somewhat shorter lives than women, but remain healthy for a larger proportion of their lives. Another conclusion that can be drawn from the figures is that the increase in healthy life years has levelled off in recent years, and has even declined as a result of the COVID-19 pandemic. We now need to ensure that this upward trend resumes.

Figure 2: HALE in Sweden, 2000–2021.
Source: World Health Organization (2024b)



From a socioeconomic perspective, the average number of healthy life years is a more relevant measure of public health than total life expectancy. This is primarily because most people prefer a healthy life to one marked by illness and limitations. From a socio-economic standpoint, it is also during the healthy years that people are most economically productive and place the least burden on the healthcare system. A public health policy aimed at extending the number of healthy life years is therefore of central importance. In practical terms, this means that healthcare must be reoriented towards preventive care, thereby slowing disease progression and keeping people healthy for longer.

An Overview of Costs in Swedish Preventive Healthcare

Over the past ten years, Sweden has had healthcare expenditure amounting to approximately 11 per cent of the country's GDP, which in 2023 corresponded to roughly 693 billion Swedish kronor (Statistics Sweden, 2025a). This figure excludes pharmaceutical costs, but covers a broad range of healthcare-related expenditures such as elderly care, administration, and various forms of preventive measures. In 2023, public authorities accounted for 86 per cent of total health expenditures, while households accounted for 13 per cent through, for example by paying patient fees (Statistics Sweden, 2025b). Sweden's health and healthcare spending is slightly

above the EU average, which stands at 10 per cent of GDP. According to Eurostat, in 2023 Sweden had the fifth-highest healthcare expenditures in the Union relative to GDP. The countries that spent more than Sweden were Germany, France and Austria, as illustrated in Figure 3 (Eurostat, 2025).

Of total healthcare expenditures in Sweden, just over 3 per cent is allocated to preventive care on average, as illustrated in Figure 4, where the red line indicates the trend over time. The average among the remaining EU countries (EU-27) between 2018 and 2022 was just over 4 per cent of total healthcare expenditure (Eurostat, 2026). During the COVID-19 pandemic, Swedish expenditure increased slightly, and preventive care was instead allocated just over 4 per cent of resources (Statistics Sweden, 2025e). However, this appears to have been a temporary increase, and we have now returned to levels similar to those before the pandemic.

Preventive Health in Practice within Swedish Healthcare

It has become increasingly common to talk about health promoting lifestyle interventions as the prevalence of lifestyle-related diseases has grown. Lifestyle-related diseases are non-communicable, chronic conditions that are caused or exacerbated by unhealthy lifestyle factors. These primarily include type 2 diabetes, cardiovascular diseases, certain forms of cancer, and obesity. By identifying risk factors for diseases such as type 2 diabetes at an early stage, disease progression can be slowed, or even reversed. High blood pressure is one factor that is commonly measured, as it is often preceded by lifestyle-related risk factors and increases the risk of secondary conditions such as stroke and type 2 diabetes. In Stockholm County alone, it is estimated that nearly one in five people die as a result of high blood pressure (Centre for Epidemiology and Community Medicine, n.d.).

Many people likely think of privately funded initiatives when discussing longevity and preventive healthcare, but in recent years the issue has begun to receive more attention within publicly funded healthcare. The problem, however, is that lengthy and rigid bureaucracy limits opportunities for improvement. In the summer of 2021, a regulation concerning the core mission of primary care was introduced into the Health and Medical Services Act (HSL, Chapter 13). The main point of the provision is that primary care should provide preventive measures with both the population as a whole and individual needs in mind (National Board of Health and Welfare, 2025). However, its practical impact has not been established, and evidence suggests that its impact has been rather limited. Some argue that the problem lies in how Swedish physicians are trained. Maria Rankka, business angel, co-founder of the diagnostics

company ABC Labs, and chairman of the board at Cellcolabs – a bio-technology company at the forefront of stem cell research – holds this view.

"A major problem in healthcare today is that Swedish doctors are taught never to order a test unless they already have a strong suspicion that the result will come back positive. This stands in stark contrast to everything that preventive diagnostics is about", says Rankka.

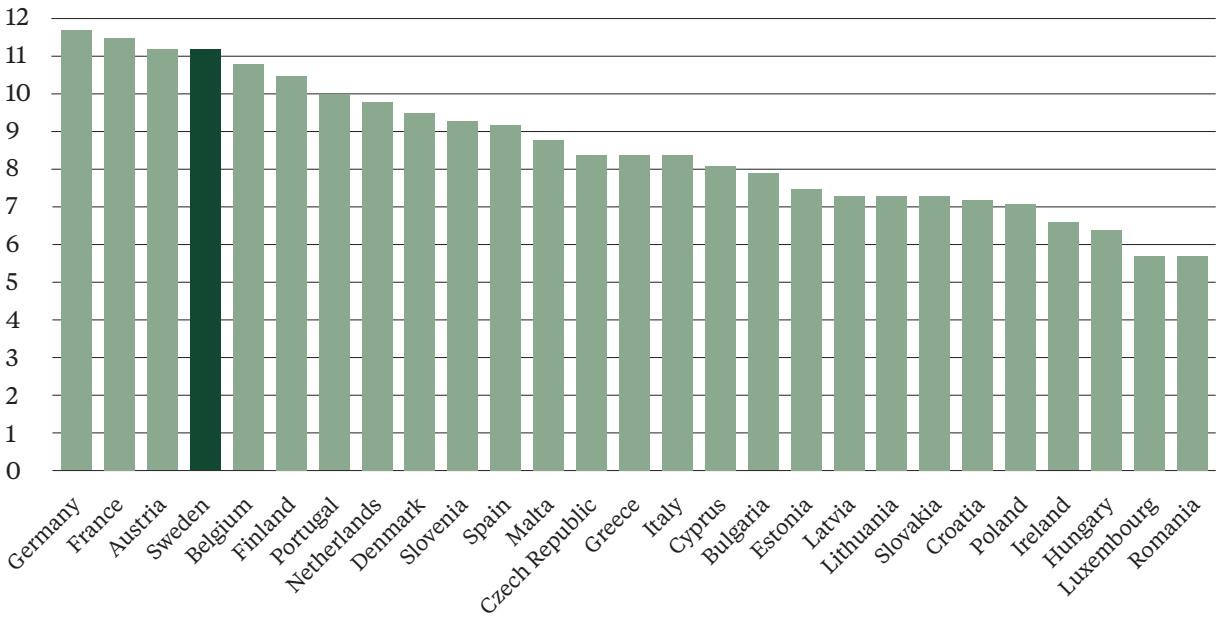
Another problem is that Swedish healthcare largely focuses on diagnosis itself, rather than on identifying the root cause of the problem. Peter Martin is a physician with a PhD in pharmacology and CEO of FunMed, which works to address chronic diseases at their root in ways that public healthcare does not. He places greater emphasis on lifestyle changes rather than solely on medication and is critical of how traditional Swedish healthcare operates.

"A fundamental shortcoming of traditional healthcare is that it is satisfied once a diagnosis has been made. The same importance is not placed on why a particular patient has developed, for example, migraine", says Martin.

Another area in which Swedish public healthcare lags behind is the prescription of GLP-1 medications such as the Danish drug Ozempic and the American drug Mounjaro. These drugs were originally intended for people with diabetes but have proven effective for weight loss, that is, an effective medical treatment for the lifestyle-related disease obesity. EPHI has previously published a report authored by physician Vincent Amble-Naess on how these medications have been received in Sweden. Some appear to believe that obesity is rooted in a lack of information or motivation. For a long time, it was therefore not considered a disease. But exactly what the underlying cause of obesity is – difficulty engaging in physical activity, dysregulated appetite, or heredity – should not matter. Being overweight or obese is associated with significant health risks and can also be stigmatising. It is therefore unfortunate that now well-established and successful GLP-1 medications are not recommended to a greater extent within Swedish healthcare.

The National Board of Health and Welfare recommends pharmacological treatment only at a BMI above 35 (that is, severe obesity; the threshold for obesity is usually set at a BMI of 30, and overweight at a BMI above 25, (The National Board of Health and Welfare, 2023)). In other words, the recommendation delays intervention rather than preventing secondary conditions such as type 2 diabetes and knee disorders. This is unfortunate, as these conditions subsequently lead to greater suffering for the patient and, moreover, a higher burden on the healthcare system. For those who do manage to have medication prescribed for weight loss, it is not subsidized, due

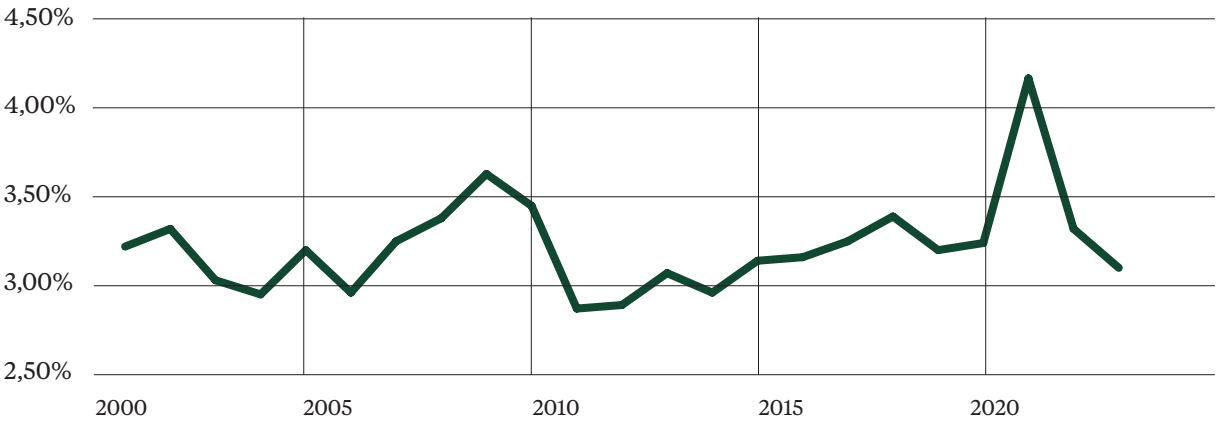
Figure 3: Current Healthcare Expenditure Relative to GDP, 2023.
Source: Eurostat (2025)



to a decision by the Dental and Pharmaceutical Benefits Agency (TLV). The decision is based on an assessment concluding that the treatment is not cost-effective. However, the assessment fails to take into account the many consequences of obesity, writes Amble-Naess in the report Är smal ett val? (2023). The Public Health Agency of Sweden reports that the estimated societal cost of obesity amounts to approximately 125 billion Swedish kronor per year, a figure corresponding to around 2 per cent of GDP (The Public Health Agency of Sweden, 2025b). The World Obesity Federation also reports that the costs of obesity are expected to more than triple by 2060 for countries such as Sweden, unless the current trend is reversed (World Obesity Federation, 2022). The consequences of one of the greatest public health challenges of our time is being deferred into the future, driving up costs, despite the fact that effective medications are already available.

In contrast to publicly funded healthcare, private health entrepreneurs are more flexible and forward-looking. The company Werlabs offers annual health check-ups through blood tests. If test results reveal risk factors, the patient is referred to primary care. A study from 2024 concludes that Werlabs' health examinations between 2015 and 2023 identified 3,589 cases of prediabetes and 3,140 cases of diabetes (Adam et al., 2024). Werlabs is not alone. Other examples of similar companies include Neko Health, FunMed, Sand Clinic, Loovi, among others. What they have in common is that they are built on private venture capital and financed by patients

Figure 4: Share of Healthcare Expenditure Allocated to Preventive Care. Source: Statistics Sweden (2025e)



who are willing to cover the cost themselves. This therefore takes place outside publicly funded healthcare, but with results that have the potential to reduce both suffering and public expenditures.

"We have helped over 300,000 individuals in Sweden. And among them, 2 per cent have an extremely high risk of cardiovascular disease. These are individuals we know will return with a stroke in eight years. Many of those who are helped in emergency care then become tied into a multi-year process in which they are dependent on extensive healthcare. This is a major burden on healthcare resources, it is great suffering for the individual patient, and it is a major cost to society as a whole. If you do a quick calculation, this amounts to 6,000 people among those Werlabs has come into contact with, and these individuals cost an average of 3 million Swedish kronor. If we say that we have managed to help half of them, that implies a saving of 9 billion Swedish kronor", says Werlabs CEO Henrik Forsberg.

"Healthcare accounts for roughly 11.1 per cent of GDP, and at the same time we know that the vast majority – various estimates put it somewhere between 60 and 80 per cent – of the burden on healthcare is caused by what we define as lifestyle-related diseases, that is, things we can influence ourselves. That corresponds to somewhere around 7–9 per cent, and if we can address half of that, then it is 4.5 per cent of GDP. That can then be allocated to more effective parts of the healthcare system", Forsberg continues.

Another well-known example of preventive care is cancer screening. According to a report from the Swedish Cancer Society from 2021, women who regularly participate in screening for cervical cancer reduce their risk of developing the disease by 90 per cent (The Swedish Cancer Society, 2021).

Finally, there are a number of simple measures that can be taken at the individual level to work preventively. One area that is often overlooked is dental health. Maria Rankka participated last autumn in the longevity conference Platinum Longevity in Boston. At the conference, investors and researchers gathered to discuss future methods for extending healthy lifespan. One thing Rankka noted was that dental health has become one of the hottest topics among experts right now. Research shows links between gum disease and poor oral hygiene, and Alzheimer's disease (Beydoun et al., 2020). Daily use of dental floss would likely reduce the incidence of Alzheimer's disease.

"The well-respected Alzheimer's researcher Rudy Tanzi said, among other things, that if you are going to choose one thing to do to prevent dementia and Alzheimer's disease, then it is to floss daily. Such large effects have been observed", says Maria Rankka.

Preventive Care from a Health Economic Perspective

An increased focus on prevention in healthcare can, in addition to reducing suffering and saving lives, also generate significant socio-economic gains. A review of 34 studies examining the United States and other major economies shows that every dollar invested in public health yields savings of approximately 14 US dollars – an investment that outperforms the expected return of most stock markets (Wenderoff, 2025). In an article published in *Nature Ageing* in 2021, the economic value of increasing life expectancy by one year is estimated at 38 trillion US dollars (Scott et al., 2021). This corresponds to roughly 112,000 US dollars per person, or approximately 1.23 million Swedish kronor. These are U.S. figures, and no comparable estimate has yet been made for Sweden.

If instead we look at the value of a working year in Sweden, equivalent to the productive contribution an individual makes to the economy, it is estimated at 481,600 Swedish kronor for women in 2024, and 590,200 Swedish kronor for men. The calculation is based on data from Statistics Sweden on median wages across all municipalities up until 2023, multiplied by social contributions (36.98 per cent) and adjusted for inflation to 2025 price levels (Statistics Sweden, 2025d). Excluding welfare costs and individual losses due to illness, somewhere between half a million

and just over one million Swedish kronor can be saved for each year of illness that is prevented and avoided.

"The Public Health Agency of Sweden (2025a) shows that sedentary behavior and insufficient physical activity cost society approximately 16 billion Swedish kronor per year, and that preventive interventions can reduce these costs. Sick leave costs around 91 billion Swedish kronor in direct and indirect costs", notes Peter Martin, CEO of FunMed.

If people remain healthy for longer, they can also work for longer. The number of working individuals aged 65–74 doubled between 2001 and 2023, reaching 20 per cent of people in that age group. In the 75–89 age group, 7 per cent were employed in 2023 (Statistics Sweden, 2024). Neda Agahi, an Associate Professor of Public Health at Karolinska Institutet, argues that the increase is mainly due to better health among older adults and the fact that more people work in white-collar roles, which are better suited to higher ages (Bolander, 2025).

Health economists have also calculated the costs associated with specific diseases. Cardiovascular diseases, which places the greatest burden on healthcare, are estimated to have led to costs of approximately 60.2 billion Swedish kronor in 2019, according to a report published by the Institute for Health and Medical Economics (IHE) (Andersson et al, 2021). At the same time, it is commonly estimated that up to 80 per cent of all cardiovascular disease can be prevented. Expanded targeted preventive measures within healthcare could therefore result in substantial societal savings.

Another telling example is the cost of care for brain disorders. Earlier this year, the Swedish Brain Foundation reported that the total societal costs of brain diseases amounted to 295 billion Swedish kronor in 2024 alone (Bäckelin, 2025). These diseases include Alzheimer's disease and other dementias, stroke, and depression. A report published by IHE also states that the cost of Alzheimer's disease and other dementias alone amounted to nearly 91 billion Swedish kronor in 2022. Moreover, the report concludes that many of these brain diseases are partially preventable through lifestyle changes. For example, 43 per cent of all stroke cases could be prevented, as that share of the disease burden can be linked to lifestyle-related risk factors. The corresponding figure for Alzheimer's disease is 39 per cent, and 30 per cent for other forms of dementia (Hjalte et al., 2024). The report also estimates the total annual societal cost attributable to these risk factors. It is estimated that the cost of Alzheimer's disease and other dementias attributable to lifestyle factors amounted to 32 billion Swedish kronor in 2022. In other words, the cases of

dementia that could have been prevented through lifestyle interventions cost society more than 32 billion Swedish kronor in that year alone.

In another report published by IHE (2022), the lifetime societal costs for 15-year-olds with obesity are estimated at approximately 2.9 million Swedish kronor, and around 4.1 million Swedish kronor for overweight 15-year-olds. The fact that overweight leads to higher societal costs than obesity is explained by its much higher prevalence (Nilsson et al., 2022). The results underscore the advantages of successfully implementing lifestyle interventions early in life.

Kristian Bolin, Professor of Health Economics at the University of Gothenburg, published the SNS report last year *The Importance of Prevention for the Financing of Future Health and Elderly Care*. In the report, Bolin presents calculations of the socio-economic savings that could be achieved if lifestyle-related diseases were reduced by just 10 per cent. That is, if the proportion of people in the population who smoke, are insufficiently physically active, are overweight or obese, or have risky alcohol consumption were reduced by 10 per cent. According to Bolin's calculations, based on data from 2011–2021, this could result in savings of more than 20 billion Swedish kronor over a ten-year period, or 2 billion Swedish kronor per year (Bolin, 2024). Thus, with relatively simple means and only a 10 per cent reduction, substantial costs can be avoided.

Health Impact Bonds

Another approach to preventing and counteracting disease is through health impact bonds. Recently, such a pilot project was carried out in Region Stockholm to prevent the incidence of type 2 diabetes. The project is the first of its kind in the region. With the help of private investments, through a financial model developed by SEB, the private and public sectors have collaborated to develop preventive healthcare efforts. The insurance company Skandia invested 30 million Swedish kronor in the project and received varying returns based on the outcome. At the start of the study, more than 900 individuals aged 50 to 60 were enrolled, all at high risk of developing type 2 diabetes. Over a five-year period, participants received support to change their habits regarding diet, physical activity, sleep, and stress (Region Stockholm, 2025).

After one year, 51 per cent of the original participants had succeeded in lowering their blood glucose levels to a level that no longer posed a risk for type 2 diabetes. Fredrik Söder is CEO of Health Integrator, which delivers the preventive health intervention in the study. He estimates that if the project were scaled up and

offered to all individuals with prediabetes in Stockholm County, it would be possible to achieve savings of 1.4 billion Swedish kronor per year, in Region Stockholm alone (Söder, 2022). Now that the project has been completed, Skandia has received full financial repayment, and the project has achieved its objectives in terms of reducing the risk of type 2 diabetes (Söder, 2025). Despite the successful outcome, the political leadership in Stockholm (Social Democrats, Green Party, Centre Party, and Left Party) has chosen not to continue the project.

In 2023, Region Uppsala followed in Region Stockholm's footsteps and launched a health impact bond, borrowing 80 million Swedish kronor for a project aimed at preventing high blood pressure. Over a three-year period, 15,000 individuals will be screened for high blood pressure, and the region expects to initiate 9,000 treatments as a result. According to the region's calculations, the intervention is expected to save 160 million Swedish kronor in avoided healthcare costs over a ten-year period (Fredriksson, 2023).

Ageing

A phenomenon that researchers have become increasingly interested in is ageing. The question is why some people age faster than others, and what can slow down process for individuals who appear to experience so-called accelerated ageing, that is, people who age more rapidly than others. The answer seems to lie in the difference between chronological and biological ageing.

Some researchers today go so far as to describe ageing itself as a disease. One of the most prominent figures in the field is David Sinclair at Harvard. ageing is often viewed as an effect of DNA becoming damaged over time. As the DNA's ability to repair this damage declines, mitochondria – the cell's power stations – also become increasingly inefficient in their energy production. In his research, Sinclair places greater emphasis on the loss of epigenetic information, that is, instructions governing how DNA is organised and deployed. In experiments on mice, he has shown that by restoring order - returning cells to an earlier epigenetic state can rejuvenate them. Sinclair likens ageing as scratches on a CD, and his method as polishing the disc so that it plays properly once more (The Sinclair Lab, n.d.).

In parallel with this, it has become more common among researchers in the field to focus on biological age, in contrast to the traditional practice of measuring age chronologically. Researchers at Karolinska Institutet estimate that the average risk of death increases exponentially by around 11 per cent for each passing year, and that by the age of 100 the annual risk of death is around 50 per cent (Danielsson, 2024). At the age of 50, this equates to an average risk of death of 0.28 per cent. However, not

everyone ages at the same rate, individual differences are substantial. A person with kidney disease, for example, ages faster than someone who is completely healthy.

Researchers estimate that the heritability of lifespan is only around 10–30 per cent. This can be compared with the heritability of dementia, which is as high as 80 per cent (Lundbäck, 2024). A large share of ageing is therefore influenced by environmental and lifestyle factors. The core idea behind the longevity trend is that, in many cases and through relatively simple means, individuals can influence whether their biological age corresponds to 40 or 60 years. According to ageing researcher Sara Hägg, Associate Professor of Molecular Epidemiology at Karolinska Institutet, physical activity and maintaining a healthy weight can profoundly affect one's biological age. Receiving a timely and accurate diagnosis also plays an important role. According to Hägg, studies show that biological age accelerates in patients prior to being diagnosed with type 2 diabetes, to slow down again once appropriate treatment is initiated – something that underscores the importance of preventive care (Lundbäck, 2024).

If the view of ageing as something that can be prevented – or even as a disease – gains broader acceptance, it is likely that research on ageing will receive increased funding. This would, for example, make it possible to identify individuals who age more rapidly at an aggregated level and introduce more targeted healthcare interventions. Breakthroughs in ageing research are crucial to extending healthy life expectancy in the population.

Longevity and the Future

For real change to occur at the population level, today's systems are not sufficient. Innovation and substantial private investment will be required. As in most other sectors, a transition means that initial costs are high, and this calls for venture capitalists who are willing to invest in and develop new diagnostics and therapies. Over time, technologies evolve and become both cheaper and accessible to more people.

"While changes are being implemented at the population level, outliers are also needed – those who are willing to test and pay for these futuristic projects. Outliers and venture capitalists drive the market, and thus development, forward", says Maria Rankka.

The most well-known example of such an individual who both invests in and personally tests various longevity technologies is Bryan Johnson. Johnson has become known for his lifestyle in which he combines a strict diet, supplements,

intermittent fasting, intensive exercise, red light therapy, and blood plasma treatments (in his case from his son), with the aim of activating the body's repair processes.

There are also a number of supplements that have drawn increasing attention for their potential rejuvenating properties. Examples include magnesium, vitamin D, NAD+ boosters, and metformin. NAD+ is a coenzyme that enables more than 500 other enzymes to function and lies at the heart of cellular energy, DNA repair, and metabolism. Metformin is a long established diabetes drug that has been used for more than 60 years, but studies have shown that it may extend lifespan and improve health even in non-diabetics. It is now being tested as a potential anti-ageing drug, as it appears to slow ageing and reduce inflammation. What makes metformin unique is that it is not being tested to cure a specific disease, but to prevent multiple age-related conditions (Soukas, 2019). Although the mechanisms are not yet fully understood, the body of supporting research is growing rapidly. Metformin is inexpensive, well-established, and according to Fortune magazine one of the most promising rejuvenation agents already available – albeit by prescription-only (Seegert, 2023).

Research into DNA and stem cells has become central to the longevity field. Researchers have shown, for example, that certain genes can be activated to repair damaged DNA, which in studies on mice has led to blind animals regaining their sight (Lu et al., 2020). In stem cell research, scientists have demonstrated that stem cells can both replicate themselves and develop into specialized cells, which is already used in treatments, for example for blood cancer and in some cases of HIV (National Institutes of Health, 2020). The number of clinical trials involving stem cells is increasing rapidly, over 4,700 are approved in the United States, and this rapid development points toward future use in an ever-wider range of areas (Talebzade & Talebzade, 2023). However, research in the longevity field is in some cases highly futuristic, sometimes to such an extent that researchers delay publication in fear that it will be perceived as science fiction. According to Maria Rankka, some leading longevity researchers struggle to secure funding for their current projects.

"A world-leading longevity researcher said that he submits applications for things they were doing in his lab five years ago, because much of what they are doing now is too futuristic for research funders to even consider", Rankka recounts.

Beyond these experimental and sometimes futuristic projects, there are a number of measures that could be implemented immediately, using relatively simple and inexpensive means. For example, healthcare could take advantage of the fact that

many of us already collect health data about ourselves. Among other things, patients could be asked to submit ECG readings from their smartwatches to their physicians. Rankka also describes the U.S. company Vasolabs, which has begun performing ultrasound examinations of the carotid artery to assess how much soft plaque has built up in the blood vessels.

“By allowing the patient to sit with a screen in their hand and see what the ultrasound shows, it often becomes easier for the patient to absorb the result. It is an effective way to motivate patients to want to change their lifestyle, because they very concretely see the consequences of their current lifestyle”, says Rankka.

Sweden as a Longevity Nation

Sweden has the potential to emerge as a leader in the longevity industry. We have a strong research base and high levels of expertise, a pharmaceutical industry that is among the world’s leading, and a population that – contrary to popular belief – shows a strong willingness to pay and puts a high premium on health. What is missing, however, is a regulatory framework that actively encourages private investors and fosters innovation.

The life science and pharmaceutical industries in Sweden remain robust. Pharmaceuticals are among the country’s top export earners, amounting to more than 151 billion Swedish kronor in 2024 (Läkemedelsindustriföreningen, 2024), and the life science sector today consists of around 4,000 companies with an estimated annual value of approximately 163 billion Swedish kronor (Business Sweden, n.d.). This gives Sweden a solid foundation on which to build. And the expansion has already begun. According to Maria Rankka, longevity clinics, preventive diagnostics practices, and private membership-based healthcare are “like mushrooms after the rain”. Once you start noticing them, they appear to be everywhere – from Daniel Ek’s exclusive Sand Clinic to the aforementioned diagnostics lab Werlabs. If Sweden combines its strong research base and industrial expertise with a more innovation-friendly regulatory framework in healthcare, it is definately possible for Sweden to become a leading longevity nation.

It is also an industry in which we should be investing, not only for its public health benefits, but also for the vast economic potential now being forecast. The longevity industry can, of course, be valued in different ways depending on how broadly it is defined. Some estimates suggest that its total global revenues could amount to around 73 trillion Swedish kronor by 2030 (UBS Wealth Management, 2025). Other analyses, with a narrower focus on the biotechnology sector, estimate mar-

ket revenues at approximately 275 billion Swedish kronor in 2025, with an expected growth to over 500 billion Swedish kronor by 2035 (Research Business Insights, 2026). If investments are made decisively now, Sweden could potentially deliver the next Ozempic-like success, a drug that accounted for a significant share of Denmark's total GDP growth in 2023.

Willingness to Pay Exists

Sweden therefore has strong preconditions to become a leader in longevity, particularly if the sector is propelled by private investment. One argument frequently raised against increased privatisation of healthcare is that people cannot afford to pay for their own care, but this does not appear to be true. Consider the number of people who already pay out of pocket for weight-loss medications that fall outside the subsidised healthcare system. Mounjaro, a competitor to Ozempic, increased its sales by an average of 25 per cent per month during 2025, from 20 million Swedish kronor in January to 154 million Swedish kronor in October, according to Svenska Dagbladet (Dahlberg, 2025). Another competing drug, Wegovy, sells for approximately 230 million Swedish Kronor per month. These are privately financed drug purchases totaling billions of kronor within the span of a single year. Conservatively estimated, this corresponds to roughly 85,000 Swedes who each month pay thousands of kronor out of pocket to achieve better health.

Other examples of entirely private sectors with strong consumer willingness to pay include veterinary care and the beauty industry. When the Swedish Competition Authority last reviewed the veterinary sector, Evidensia and Anicura accounted for 40 per cent of the market (The Competition Authority, 2018). In 2024, the companies reported revenues of approximately 2.6 billion Swedish kronor and 1.4 billion Swedish kronor respectively (Allabolag.se, n.d.). In the beauty industry, meanwhile, estimates from various trade bodies suggest that at least 300,000 cosmetic injections are performed annually (Adin Fares, 2022). Prices vary widely, from 2,000–5,000 Swedish kronor for injections, and from 20,000 Swedish kronor to several hundred thousand for surgical procedures, depending on the intervention, and the supply is extensive. The number of cosmetic clinics more than doubled between 2010 and 2021 (Mirtel Design, 2023). There is also a significant dark figure, and actual demand is likely higher, as many people choose to travel abroad for cosmetic procedures.

Conclusion

Today, Sweden devotes vast resources to repairing damage once it has already occurred, but far too little to preventing illness in the first place. This report argues that a shift from healthcare to health care is not only possible, but also rational: the research is strong, the technology exists, the willingness to pay is clear, and the potential socio-economic gains would be substantial.

The next step must be to make prevention a core mission, supported by modern regulatory frameworks, better incentives, and closer interaction between public healthcare and private innovation. If we succeed in extending the years of good health, both people's quality of life and Sweden's long-term prosperity will be strengthened.

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