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The shift to prevention:

Realising the socio-economic potential



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Executive summary

Investing in prevention is no longer optional – it is an economic and social necessity for the UK. Despite strong evidence of its value, prevention remains underfunded, accounting for only 5-6 per cent of total health expenditure in the UK. Most spending is directed towards treatment rather than tackling the root causes of ill health, placing unsustainable pressure on the NHS and constraining national productivity and wellbeing.

Our 2025 report, 'The Shift to Prevention: A New Ecosystem of Health Promotion and Protection' (by Deloitte, Google and the Royal Society) argues that the UK should move beyond a treatment-centric model.¹ It advocates a data-, AI- and technology-enabled prevention-first system designed to protect health, rather than just responding to illness.

These ideas align with the UK Government's 2025 10-Year Plan for Health, which positions prevention and population health as central to the future of the NHS and wider care system and requires long-term cross-sector involvement and investment across schools, communities, workplaces to build long lasting wellbeing and resilience.²

The UK has bold ambitions, and progress will take significant intentional actions across government, the health system and beyond. To deliver measurable outcomes, the UK needs a strategic, evidence-based approach to prevention. To explore how the UK can unlock the full value of prevention, and translate these strategies into action, this report examines and answers four key questions:



Why and where should we invest? Prevention is an economic and social imperative that delivers major returns across all life stages. Many health challenges - from poor maternal mental health to late-life frailty – stem from preventable risks. Our analysis shows that earlier interventions yield higher returns. Every £1 invested in early-life prevention (maternal health, oral health, diet, exercise, and vaccination) returns £13.50, while later-life interventions (frailty, loneliness, respiratory disease) yield £5.30.



How much do we invest in prevention and why do we currently underinvest? The UK continues to underinvest in prevention, spending around just 5-6 per cent of total health expenditure despite strong evidence of its benefits. We evaluate how short-term funding cycles and narrow appraisals focus on immediate NHS costs and a limited period of life, overlooking the lifelong and cross-sector benefits of prevention – such as increased productivity, reduced social care costs, and improved wellbeing. Until funding and appraisal frameworks capture these wider, long-term gains, prevention will remain undervalued and underfunded.



What could we achieve with greater investment? Prevention delivers exceptional societal value – an average ROI of £8 for every £1 invested. As part of this, employers also stand to gain, with mental health initiatives returning £4.70 for every £1 spent through reduced absenteeism and higher productivity. As for the health system, our analysis shows that if additional spending could deliver a return of £3 for every additional £1 spent, increasing prevention spending from the current \sim 6 per cent to 10 per cent could yield a return of £42bn in 10 years. Wider societal impacts could be two to three times this.



Who should pay and how should we pay? The greatest value comes when health and social systems invest together. Healthcare-led interventions (screening, vaccination, lifestyle support) should be complemented by investment in the wider determinants of health - such as housing, education, transport, and employment. Unlocking this potential requires new funding models, incentives, and partnerships that reward long-term outcomes. Examples include outcome-based payments, social impact bonds, and blended public-private investment. Employers and consumers also play a vital role - from workplace wellbeing programmes to digital access and insurance-linked incentives that embed healthy choices into daily life. To achieve sustainable impact, funding should shift from siloed, short-term budgets to collaborative, cross-sector investment that drives long-term health and economic resilience.

Prevention is no longer a 'nice to have' – It is an economic and social imperative

The shift towards prevention is no longer a future ambition: it is a present necessity. Prevention plays a pivotal role in fostering a healthier and more prosperous society. As mounting pressure in the NHS threatens its long-term sustainability and affordability, investing in prevention can result in fewer preventable illnesses, less demand for acute care services, and

lower long-term treatment costs for chronic conditions. Our 2025 report, 'The Shift to Prevention: A New Ecosystem of Health Promotion and Protection' (by Deloitte, Google and the Royal Society)¹ argues that the UK should move beyond a treatment-centric model.

It advocates a data-, Al- and technologyenabled prevention-first system designed to protect health, rather than just responding to illness.

We have discussed primary, secondary and tertiary prevention this report, with most of our analysis focusing on primary and secondary prevention interventions. See Figure 1 below for our definition of prevention and why it is important.

Figure 1. The definition of prevention and why it is important

What is preventive care?

1
Primary prevention
Aims to stop disease before it starts

Secondary prevention
Detects disease early to prevent progression

Manages existing diseases to reduce complications and improve quality of life

this is the primary focus of this report

Why is preventive care important?



Key insights from The Shift to Prevention report include how:

- to redefine prevention as a crosssector responsibility spanning education, work and the environment and the wider social determinants of health such as housing and employment.
- a shift is needed from isolated programmes to cross-collaboration across the public, private and third
- the use of data and digital tools can be used to predict risk, personalise support, and empower individuals and communities.
- to rebalance funding by shifting investment upstream and away from late-stage, high-cost care.

These ideas align with the UK Government's 2025 10-Year Plan for Health,² which positions prevention and population health as central to the future of the NHS and wider care system. The Plan emphasises:

- reducing the major preventable disease risk factors, with national targets for obesity, smoking, and physical inactivity.
- expanding early intervention and screening, especially for cardiovascular, respiratory and mental health conditions.
- empowering Integrated Care Systems (ICSs) to lead localised, place-based prevention strategies.
- tackling inequalities through targeted action on social determinants of health (i.e. non medical factors that influence health outcomes, including socioeconomic status, education, and environment).
- · strengthening the digital infrastructure to enable predictive and personalised health management.
- The 10-Year Plan for Health calls for a reimagined health ecosystem where the NHS is one part of a broader network.

This network, including local government, businesses, communities, schools and technology providers, collectively invests in drivers of longterm wellbeing.

The Plan also highlights a growing consensus that improving the nation's health and ensuring the sustainability of the NHS requires a profound shift in the approach to investment in health.

Despite these shared ambitions, major questions remain unanswered. To move from rhetoric to results, the UK needs a more strategic, evidence-based approach to prevention.

This report explores four critical questions that lie at the heart this shift:

- 1. Why and where should we invest? Prevention is no longer a 'nice to have' - it is an economic and social imperative, but how do prevention strategies and returns differ across stages of life?
- 2 How much do we invest in prevention and why do we currently underinvest? Do the trends in UK spending on prevention reflect our ambition? What barriers - political, financial, or structural

 - limit sustained investment in prevention?
- 3. What could we achieve with greater investment? What are the societal benefits of investing in prevention?
- 4. Who should pay and how should we pay? As prevention becomes a societal priority, how should financial responsibility be distributed across government, business, and communities? What new models can unlock long-term, coordinated investment in prevention?

By answering these questions, we aim to help policy makers, innovators, investors and system leaders understand the potential return on investment (ROI) of prevention and turn ambition into action, building a future where good health for all is a shared, sustained, and strategic outcome.



hy and where should we invest n prevention?

Prevention matters at every stage of life

Health challenges emerge and intensify across the life course – from poor maternal mental health to late-life frailty (see Figure 2). While the symptoms appear at different stages, many of the root causes are preventable.

A life-course approach to prevention is essential. Rising rates of obesity in childhood, poor mental health in adolescence, and unmanaged risk

factors in working-age adults can ultimately manifest as multimorbidity, frailty, and high service use in later life. Prevention isn't just a public health goal; it is a strategic response to mounting economic, demographic, and systemwide pressures. By investing earlier, and tackling the biggest modifiable risk factors that contribute to preventable diseases, the UK can:

- extend healthy, productive years of life
- reduce demand on the NHS and adult social care.
- enable more people to stay in work and contribute economically.
- narrow avoidable health inequalities between regions and communities.

Figure 2. Preventable healthcare trends across the life stages













In-utero to 5 vears old

- 15-20% of women experience perinatal depression and anxiety
- 1 in 45-year-olds have visually obvious tooth decay
- · High but declining uptake of the childhood vaccination programme
- 47% of children experience adverse childhood experiences

School and education

- 1 in 5 children have a probable mental disorder
- 52% of children are not physically active
- 1 in 3 children are overweight (15% obese)
- 4 in 5 children do not eat five or more fruits and vegetables per day

Working age population

- 1 in 4 working-age people have poor mental health
- 3 million economically inactive due to long-term sickness, 53% have depression or anxiety
- 64% of adults are overweight (incl. 1 in 4 obese)
- 18% of adults selfreported a long-term musculoskeletal (Musculoskeletal conditions) health condition

Older community and social care

- 7% of people aged 65+ are often lonely
- 42% of adults aged 55+ are physically inactive
- 3 in 5 adults aged 65+ have hypertension (high blood pressure)
- 21% of adults aged 65+ have diabetes

EXAMPLE HEALTHCARE TRENDS

Public health and statistics data shows that:

- in 2023 over 75,000 deaths in England were attributable to conditions that are considered preventable,³ reflecting a significant societal and emotional cost to individuals, friends and families.
- healthy life expectancy is just over
 ~62 years, with widening regional and
 socio-economic inequalities.⁴
- compared to countries like France, Sweden and the Netherlands, the UK has experienced a slower post-COVID recovery in life expectancy and a sharper decline in workforce health.⁵

The economic impact is also substantial. Working-age ill health and disability preventing work are estimated to cost the UK between £240 billion and £330 billion annually. This figure encompasses economic inactivity, sickness absence, informal provision of care, and social security benefits.⁶

We apply the life stage prevention framework (Figure 3) in this report (as previously published in The Shift to Prevention: A New Ecosystem of Health Promotion and Protection)¹.

This framework recognises that prevention cannot be treated as a single intervention but should be tailored across the course of life - from early childhood screening to workplace wellbeing, to connected digital care in later life. We use this framework to review the research literature on the return on investment (ROI) of interventions at each life stage, identifying where prevention yields the greatest downstream savings from a societal perspective.



Figure 3. Healthy lifespans and spending on health will increase by 2035, driven by more comprehensive interventions across life stages

Life stages Workplace Midlife & Older community 'In utero' to School & 5-years education & family retirement & social care Health interventions across life stage (today vs 2035): ê Parental responsibility Focus and spend on prolonging healthy lifespans: HCP pushed citizen lifestyle advice Aged based screening & **Today** 8%1 Vaccine programmes Vaccine programmes Patient push biochemical interventions (e.g., DOAC, statin, GLP-1s for obesity) Signals from wearables to adopt health behaviours (e.g. exercise) Newborn blood Selected digital tools to support conditions (e.g. mental health, sleep) Multiple times increase in focus and Parental responsibility spend Expanded and modernised screening, vaccination, mental health and chronic disease prevention programmes (e.g., targeted, genomic led, and digital) Need led biochemical interventions (for Long Term Conditions and ageing) Connected Digital Care – early detection & alert of subtle indicators disease onset for proactive intervention 2035 Vision Opt-in genomic and multi-omic Omics in every-day care testing* Preventative data-led population health management (e.g. chronic condition or infectious disease)

Key Fundamentals to get right Go further faster Design for the future

^{*} Early life testing, in the absence of preventive therapies that can be applied immediately, is something that requires careful ethical consideration
Source: 1 ONS, 'Healthcare expenditure, UK Health Accounts: 2022 and 2023', Figure 5: Government spending on preventive care decreased in 2022.

Increased spending could make prevention interventions across all life stages:

- more targeted: tailored to individual risk profiles using genetics, family history, biomarkers and behavioural data.
- digital: enabled by connected devices, wearables and Al-driven platforms.
- integrated: embedded in everyday environments like schools, workplaces, homes and communities.
- **proactive:** shifting from reactive population health to anticipatory precision prevention.



How much do we invest in prevention and why do we currently underinvest?

The proportion of healthcare expenditure in the UK on prevention has remained relatively stable, except during the pandemic

Despite widespread recognition of its value, the UK continues to underinvest in prevention. Preventive care spending has remained at around 5-6 per cent of total UK health expenditure for over a decade, with government financing around 75 per cent of primary

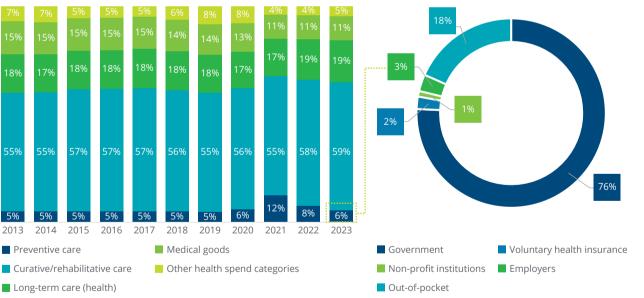
expenditure (see Figure 4). Most funding still flows towards treatment rather than early intervention, reflecting a system designed to respond to illness rather than preventing it. While investment significantly increased during the COVID-19 pandemic,⁷ prevention

spending has since plateaued, indicating the need for structural change to shift long-term funding priorities from short-term crisis response to sustained preventative action.

Figure 4. There is an ambition to shift from treatment to prevention; however, the proportion of healthcare expenditure on prevention has been unchanged over the past ten years, with the exception of 2021

Total health expenditure in the UK

Preventive care expenditure in the UK, 2023



Sources: ONS UK Health Accounts

However, there have been changes in who pays for prevention, with an increase in the proportion of preventative care spending by nongovernmental stakeholders (see Figure 5). This shows that:

- Out-of-pocket spending on prevention has been steadily rising, from around 11 per cent in 2013 to about 18 per cent in 2023. This is driven by out-ofpocket expenditure at dental practices and equated in 2023 to about £49 per UK adult.
- Employer investment outside health insurance schemes on prevention has declined steadily from 7-8 per cent in 2019 to around 3 per cent in 2023, when it amounted to about £5 per employee.
- Private medical insurance (around 2 per cent) and non-profit institutions (around 1 per cent) played important, though smaller, contributory roles.

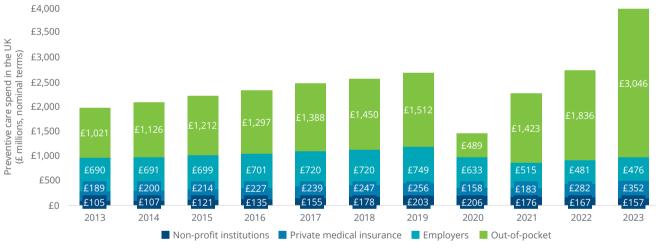
These trends in prevention expenditure could lead to:

 Worsening health outcomes and widening inequalities if individuals bear more prevention costs.

- 2. Rising downstream NHS costs due to the incidence of more extensive, and expensive, acute care interventions down the line.
- 3. Missed opportunities for shared investment Employers, insurers and local governments all have a stake in a healthier population. The UK government's 2025 10-Year Plan for Health² calls for stronger workplace health initiatives, expanded digital prevention tools, and new public–private partnerships.

Figure 5: Out-of-pocket spending has been gradually increasing since 2013

Out-of-pocket, employer PMI and non-profit spend on preventive care in the UK



Sources: ONS UK Health Accounts.

A societal lens is required to understand the broad impact of prevention investment

In order to understand the societal impact from investment in prevention, a new holistic framework for measuring ROI is needed. This framework should capture a broad range of outcomes across health, economic and societal domains. We looked at six core areas of benefits that contribute to the societal ROI from preventive interventions.

 Healthcare costs: Direct savings to the health system from reduced service use, such as fewer GP visits, hospitalisations, and medication needs.

- Individual quality-adjustedlife-years (QALYs): A combined measure of both the length and quality of life gained: one QALY equals one year of life in perfect health.
- 3. Earnings: The increase in an individual's lifetime income due to better health and education, linked to higher productivity and job stability.
- 4. Productivity: The economic benefit from people working more effectively, reducing time off (absenteeism) and working despite illness (presenteeism).
- 5. Broader public sector and societal costs: Savings in other public services (e.g. education, social care, criminal justice) and broader economic impacts, such as reduced dependency on welfare or housing support.
- Family and friends (informal carers): Reductions in the unpaid time and emotional burden borne by carers, if loved ones are healthier, more independent, or better supported.

Earlier action, greater return: societal ROI from prevention across life stages

To assess the ROI of investment in prevention, which is already established in research literature, we identified and conducted a review of 100 papers that estimate the ROI from prevention at different life stages. For our analysis, we define ROI as (benefits-costs) / costs. It therefore sets out the average net societal return for every £1 invested in prevention at each life

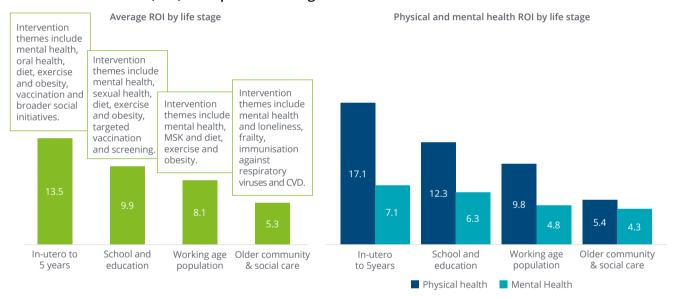
stage. The literature covers a range of interventions, cohorts, measured impacts and time horizons. More detail on the approach to the literature review is set out in the Appendix.

Our analysis of the reviewed literature suggests that the earlier in life the prevention ecosystem intervenes, the greater the measured ROI (Figure 6).

While the literature review was not exhaustive (considering 100 studies in total), this finding reinforces the strategic and financial case for early intervention.

Figure 6: The average societal ROI from prevention is greater from earlier-in-life investment

Despite the underestimated impacts of preventive interventions, our analysis shows that the return on investment (ROI) from prevention is greater the earlier in life it is invested in



Sources: Deloitte analysis

The impact from earlier investment is likely to be greater because:

- 1. it shapes a trajectory of health behaviours: intervention in the perinatal period and early childhood development lays the foundation for lifelong health.
- 2. it prevents early risks becoming lifelong burdens: for example, children with obesity are five times more likely to become obese adults, increasing their risk of type 2 diabetes and cardiovascular disease.8

- 3. it buys more 'healthy years':
 - earlier interventions have more time to accrue benefits, by delaying or preventing altogether the onset of disease (e.g. earlier stage detection through cancer screening).
- 4. it supports health equity: early interventions delivered through schools, communities or universal child health services are particularly effective in reducing inequalities. Tackling risks early in disadvantaged populations helps reduce gaps in life expectancy and healthy life

expectancy, which currently stand at nearly 10 years and 18 years respectively between the most and least deprived in England.⁹

Investment in high impact opportunities across early-life and school-age is key to generating long-term societal benefits, while continuing to support working age and older adults through targeted digital, behavioural, and clinical initiatives.

Figure 7: Reasons for underinvestment in prevention



Short-term focus

Short-term budgetary pressures require organisations to demonstrate in-year cashable savings. Preventive initiatives tend to have longer-term pay back periods and are not always prioritised.



Impacts underestimated

Investment in prevention generates a broad range of benefits. Most studies do not quantify the full scope of benefits and limit the appraisal period rather than take a lifetime view. This is due to reasons such as data access issues and the difficulty in establishing and isolating a clear quantitative link between intervention and outcome.



Payer vs. beneficiary

The benefits of preventive initiatives do not always accrue to those who pay for them. Benefits accrue across and within different stakeholder groups (individuals, schools, employers, health systems – primary care, health systems – secondary care, governments) making it difficult for one stakeholder to justify the full investment alone.



Incentives through funding

Current funding models reward treatment, not prevention.

Health systems are incentivised to treat illness, not prevent it even when prevention is cheaper and more effective in the long term.

Sources: Deloitte analysis

Addressing these challenges is essential to embed prevention as a foundation for sustainable and equitable health systems.

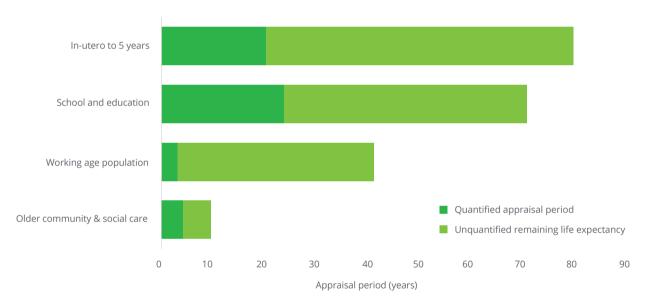
Short term focus on budgets and returns

Figure 8 shows how the average appraisal period in the research literature we reviewed is less than the actual lifespan over which prevention delivers benefits.

- Early childhood interventions were appraised on average over 20-25 years, yet their impact extends across a lifetime. Education, earnings, long-term health, and care needs are shaped profoundly in the first two decades of life, with payoffs likely to accrue over a long time horizon.
- School-age and adolescent interventions are often evaluated only into early adulthood, which can overlook decades of later health and economic benefit.
- Working age interventions are usually assessed over just 1-2 years, with a focus on short-term productivity benefits, even though conditions like obesity, musculoskeletal disorders, and mental health problems could affect productivity, employment and post-retirement health for decades.
- Older population interventions, such as benefits from falls prevention or early dementia support, are appraised over short time horizons, even though they could delay costly social care and hospitalisation for many years.

Figure 8. Average appraisal period of preventive intervention studies, by life stage

Average appraisal period of preventive intervention studies, by life stage



Sources: Deloitte analysis

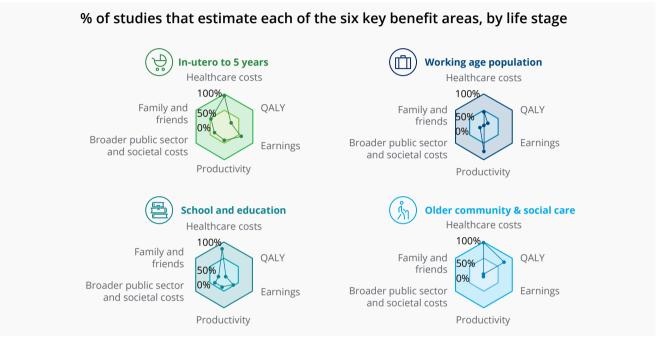
Short appraisal periods typically focus narrowly on direct NHS costs and so fail to capture wider cross-sector benefits across education, employment, productivity, social care and individuals' quality of life. This creates a structural bias: acute care appears more valuable because its benefits are immediate and easily measured, while prevention is undervalued because its payoff is long-term and harder to quantify.

Studies estimating the ROI from prevention do not always measure societal benefits

We looked at how many of the 100 papers reviewed measured impacts across our framework. Most studies of preventive care focus on healthcare cost savings, often not considering

wider gains in quality of life, productivity, earnings, and support for families and communities. For the studies on the working-age population, productivity is measured almost exclusively, with limited consideration of wider societal impacts. Figure 9 shows how, in the research literature we reviewed, the impacts measured differ between them.

Figure 9. Studies fail to capture the full scope of prevention's benefits



Sources: Deloitte analysis

This limited scope for assessing the benefits of investment in prevention results in a payer-beneficiary mismatch. The organisation bearing the cost of a preventive initiative is not always the one that reaps the benefit. This misalignment plays out differently across the course of life (see Figure 10). For example:

 Intervention at schools age can improve lifelong earnings and reduce reliance on health and social care in the long run.

- Supporting mental health in the workplace benefits not just employers.
 Working age studies tend to focus on productivity impacts, with significantly less emphasis on healthcare cost savings – despite the health care system being a beneficiary.
- Preventing falls among older adults avoids hospitalisation, but also delays residential care and preserves independence, reducing the burden on broader public sector and societal costs and on family and friends.

Yet many of these outcomes are rarely monetised or modelled, reinforcing the perception that prevention is intangible or hard to justify.

Figure 10. Payer vs beneficiaries of life-stage prevention interventions (non-comprehensive)

	Payers	Beneficiaries	Why this matters
Early years and school age interventions	Local authoritiesEducation budgetsSchoolsNHS	 The NHS (through reduced chronic disease later in life) Employers (through a healthier, more productive workforce) Society (through higher earnings and reduced welfare dependency) 	The education sector pays for interventions, but the bulk of the financial and health returns are realised decades later, outside its budget
Working age population interventions	 NHS Employers (via workplace wellbeing and occupational health programmes) Local authorities 	 Employers (reduced absenteeism and presenteeism) The wider economy (higher productivity and tax receipts) Families (better household stability) NHS (reduced healthcare costs) 	Employers fund interventions but often only capture short- term productivity gains, while the NHS and Treasury realise longer-term cost savings and fiscal benefits
Older population interventions	 NHS Local authorities (social care budgets) 	 The NHS (through avoided admissions) Local authorities (delayed residential care) Carers and families (reduced burden) 	The costs are highly visible in NHS and local authority budgets, while the wider value – reduced carer burden, avoided welfare dependency, improved wellbeing – is rarely monetised or modelled

Sources: Deloitte analysis

Why this matters for policy

As discussed in The Shift to Prevention: A New Ecosystem of Health Promotion and Protection report,¹ an integrated system-wide approach to prevention requires input from cross-sector actors beyond the NHS. The payer-beneficiary gap means that prevention consistently looks like a cost centre in the short term for some and a profit centre for someone else in the long term. Unless funding and appraisal frameworks are reformed to recognise and share these cross-sector benefits, sustained investment in prevention will remain a challenge.

What could we achieve with greater investment?

From the literature we reviewed, we have estimated societal benefits of £9 for every £1 of prevention spending, giving an ROI of £8 per £1 invested

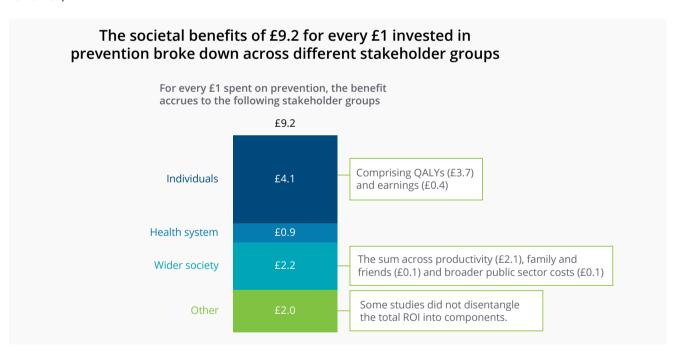
The time period considered by the research literature we reviewed ranges from one year to a whole life. The benefit has been averaged across life stages (according to population size) and intervention theme within a life

stage (according to the prevalence of a condition) to estimate an average benefit.

Figure 11 shows the findings from our review of the impact of prevention at different life stages.

These show that the weighted average societal benefit from preventive interventions is £9 for every £1 invested, representing an ROI of £8. This benefit accrues over an average appraisal period of 9 years.

Figure 11: Breakdown of societal benefits for different stakeholders (average across the 100 research papers reviewed)



Sources: Deloitte analysis

Our analysis show that for every £1 spent on prevention, the benefits accrue as follows:



Health system benefits

(about £0.9 of the £9 benefit) were the most commonly measured impact, with 49 studies reporting an impact. Despite being frequently measured, they represent a relatively modest benefit as they are not measured over a long-time horizon and there are significant variations in the benefits at the intervention level and across life stages.



Individuals (About £4.1 of the £9 benefit) in the form of improved quality of life and health outcomes. Where measured, QALYs and earnings show the greatest ROI from prevention spending. However, QALY impacts were only measured by 16 per cent of the research papers and earnings by 10 per cent.



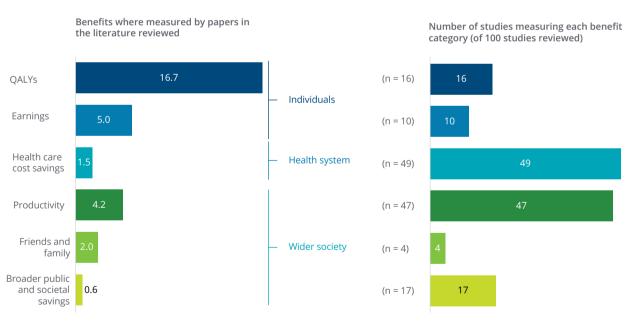
Wider society (about £2.2 of the £9 benefit). Productivity benefits made up the majority of wider societal impacts measured. Productivity benefits were predominantly measured by studies looking at the working age population and in particular relating to benefits to employers from mental health interventions. Impacts measured typically included the effects on reductions in absenteeism and presenteeism.

Note that not all studies broke down the benefits into specific categories of benefit. This accounts for the additional about £2.0 in the total benefits of £9. The weighted average societal benefit, and therefore the ROI, is likely to be underestimated, as a broad societal measurement framework and long appraisal period are not used. See Figure 12 below.

Figure 12: Overview of benefits measured in the reviewed research papers, by category and number of papers

The estimated benefits differs across category for every £1 of prevention spend

However, not all impacts are measured in all studies



Sources: Deloitte analysis

The results are based on a review of the literature on the ROI at different life stages, and they demonstrate that a broad societal value could be unlocked through investment in prevention.

There is significant societal value that could be unlocked through prevention

Health system

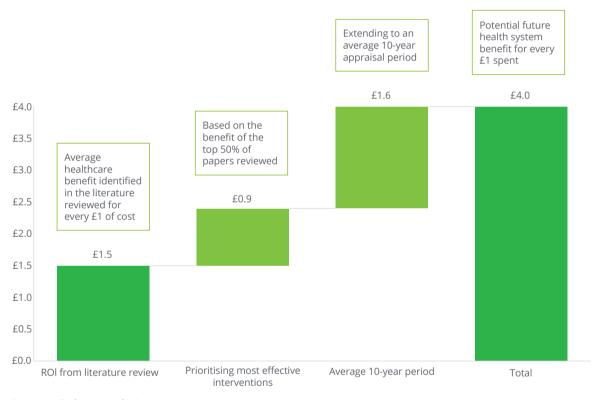
As set out earlier, the health system benefit was around £0.9 of the £9 total societal benefit. However, as shown in Figure 11, when looking at only the 49 papers which measured the healthcare system benefit, it was £1.5.

However, there were variations in the literature in both the time horizon considered for the appraisal and the benefits reported.

Figure 13 below shows how the benefits in the reviewed literature could increase if:

- the interventions with the greatest measured benefits were prioritised (illustrated in the Figure based on the top 50 per cent of interventions in the literature).
- the average appraisal period was increased from 6.7 years to 10 years, assuming for illustrative purposes a simple linear relationship between benefits and investment.

Figure 13. Example of the future return to the health system over a 10-year period



Sources: Deloitte analysis

Under these assumptions, longer-term measurement and more targeted investment could yield a benefit of around £4 for every £1 spent on prevention for the health care system.

If this could be realised across future spending on prevention, it would represent a significant opportunity.

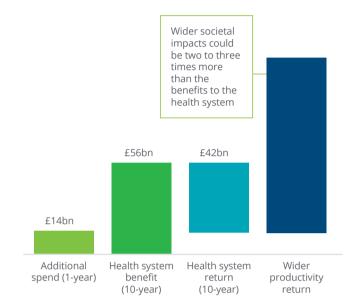
As set out in Figure 4, prevention currently represents about 6 per cent of total UK healthcare expenditure.

Figure 14 illustrates two indicative scenarios on the health system return if additional spending could deliver a benefit of £4 for every additional £1 spent in 10 years, a return on

investment of £3. This considers the share of healthcare expenditure on prevention increasing to: 10 per cent (around £14bn additional spending).

Figure 14. Potential benefits from additional spending on prevention

Increase prevention spending to 10 per cent with £3 return for every additional £1 spent



Sources: Deloitte analysis

It is important to note that many of the research studies included in this analysis focused on highly specific interventions in certain settings, locations and by life stages. Consequently, the scalability of their estimated impacts is uncertain. Our analysis therefore provides only an indicative illustration of the potential returns from preventive healthcare spending, in order to illustrate the potential scale of the opportunity.

Although our estimates are illustrative only, they demonstrate that there are substantial potential returns to the health system from investing in targeted prevention opportunities.

However, the source of funding and who should pay need to be considered.

Individuals

Significant benefits accrue to individuals in terms of improved quality and length of life. ONS data show that in 2023 around one in five deaths in the UK were considered avoidable (about 117,500), of which over 75,000 could be attributed to preventable conditions.

Employers

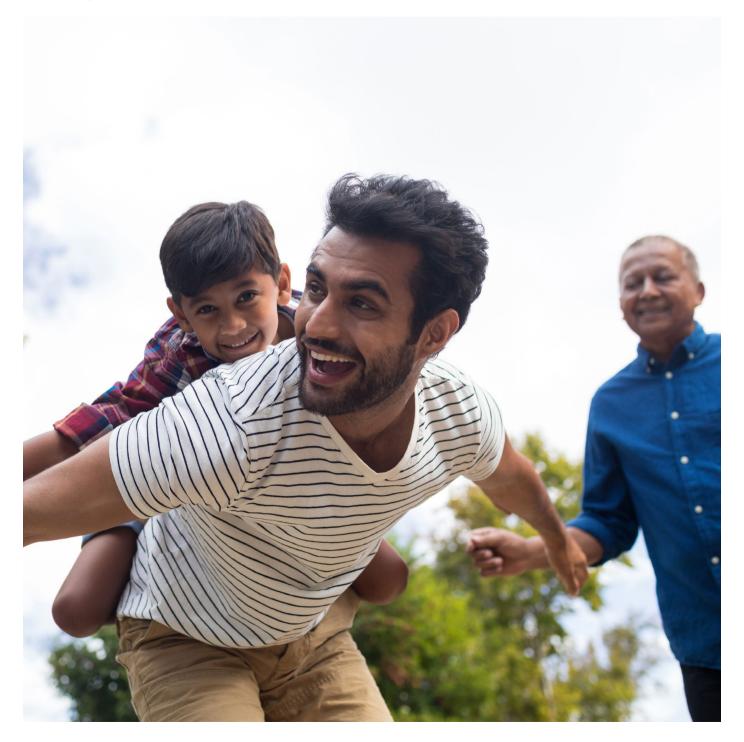
From the literature we reviewed, the average ROI from prevention on productivity was £4 for every £1 spent. This was based predominantly on benefits to employers from investment in mental health interventions (estimated to be a return of £4.70 for every £1 spent, as set out in Deloitte's cost of mental health to UK employers report¹0), but also considered interventions relating to Musculoskeletal disorders and physical inactivity.

According to ONS data, organisations in the UK spent around £476m on preventative healthcare in 2023 (excluding expenditure on health insurance)⁷, realising c. £2bn of savings per year. This highlights the potential benefits for employers from expanding their role in offering prevention services to employees to drive additional productivity gains.

Wider society

It is not just the healthcare system that could gain from investment in prevention. A recent report from the Department for Work and Pensions (DWP), finds that the cost to the UK economy of working age ill-health and disability that prevents work costs is over £240bn per year.⁶

Investment in prevention healthcare interventions could reduce the cost of this burden and provide positive ROI for the UK economy.



Summary: Potential benefits of more spending on prevention

The literature reviewed shows a significant societal ROI from investment in prevention, across multiple stakeholder groups. The broad societal value is summarised in Figure 15 below.

Figure 15. The societal value of prevention across the stakeholder ecosystem





INDIVIDUALS

Improving the rate of mortality from preventable causes by 7 per cent could lead to:

5,400

Lives saved each year

15

Healthy life years gained per life saved

£5.8bn

Societal value through additional life years



FRIENDS AND FAMILY

The impact of ill-health extends to wider friends and family, impacting upon wellbeing, ability to work and also imposing a financial burden. However, these impacts are not often measured.



HEALTH SYSTEM

If as a society we increased spending on prevention from 6-10%, this could:

£14bn

Additional spending

E42bn

Return, with a 3:1 ROI



EMPLOYERS

£500m spend

Current spend on preventive healthcare (excluding health insurance)

£2bn benefit

Current employer benefits with ~£4 benefit for every £1 spent

£8bn benefit

Employer benefits if they spent £2bn on preventive healthcare and generated a £4 benefit for every £1 spent



WIDER SOCIETY

The current economic cost comprises:

2.5 million people

Inactive due to longterm sickness

200,000 people

Inactive due to temporary sickness

185 million days

Of sickness absence

550,000 carers

Out of work due to working age ill-health

Sources: Deloitte analysis

Who should pay and how should we pay?

A central question for prevention policy is whether resources should be concentrated within the healthcare system (screening, lifestyle interventions, vaccination) or directed towards the wider system that shapes the social determinants of health (education, food, environment, housing). The evidence shows clearly that spending in both areas is essential and would deliver shared outcomes and complementary prevention returns on investment (Figure 16).

Figure 16. Combining healthcare system and wider social investments prevention interventions to deliver healthier outcomes

Shared outcomes Wider system and social determinants Healthcare system prevention of health prevention **Healthy and productive** Vaccinations and immunisation Healthy places: safe housing, green population programmes spaces, clean air Screening and health checks **Reduced health Education and early years support** inequalities Preventive prescribing & lifestyle Community resilience and social interventions **Economic and societal** connections resilience Structured disease mgmt. to prevent complications Access to healthy food More immediate NHS savings Long-term health and social returns

Sources: Deloitte analysis

While health services deliver targeted prevention, they are most effective when supported by cross-sector upstream preventions in education, housing and the environment. The healthcare system addresses the immediate determinants of health, while the wider aspects of society create the conditions that sustain healthier lives – together building resilience and reducing demand on acute services over time.

The NHS Diabetes Prevention
Programme (DPP) demonstrates that
healthcare system-led prevention can
deliver measurable health and economic
benefits through screening of at-risk
adults and the adoption of healthier
eating habits, increased physical

activity and weight loss.¹¹ Research demonstrates that the DPP programme reduces the risk of developing Type 2 Diabetes by more than a third for people completing the programme. However, greater potential could be realised by embedding it within a wider city-level prevention ecosystem that tackles the environmental and social factors (e.g. the social determinants of health) driving diabetes risk.

For example, international initiatives such as Novo Nordisk's Cities for Better Health show how this can work in practice. ¹² By combining community engagement, data-driven urban planning, and policy changes to promote healthier food and active mobility,

participating cities have achieved measurable reductions in obesity, cases of diabetes and overall improved population health.

If a similar model were adopted in the UK, aligning the NHS DPP's clinical and behavioural interventions with local government action on food systems, transport and housing, the outcome could be a greater ROI and broader societal gains, including reduced health inequalities and greater economic resilience.

New funding models, new funders and new incentives can make prevention investments more effective

Realising maximum ROI from prevention requires both unlocking new sources of funding and making existing investments more effective. Prevention is often given a low priority because the benefits accrue slowly and across sectors. Figure 17 shows how this can be changed through innovative financing models, new types of funding and smarter use of data and technology to engage stakeholders and consumers in a prevention first approach.

Figure 17. New funding, incentives and innovations fuelling the prevention ecosystem and consumer engagement in their health

Increase funding

Through new models, funders & incentives

+

+

New funding models

- Long-term budget cycles
- SDG bonds / social impact funds
- Private-sector mission led initiatives

New funders

- Health insurance companies
- Employers
- Place-based / community initiatives

New incentives

- Primary and secondary care incentives
- · Aligning employers with public health goals

Sources: Deloitte analysis

To boost investment in prevention, a fundamental shift is required in how we incentivise all stakeholders within the ecosystem. This involves not only re-evaluating funding mechanisms but also actively seeking out new funders and innovative funding models. Creative and collective approaches are essential to drive up investment. These range from the development of impact bonds and social impact venture funds to expanding funding sources through employer-led wellbeing programmes,

health insurance incentives linked to healthy behaviours, and place-based community initiatives.

Furthermore, to fully capitalise on the increased investment, it is crucial to ensure interventions are evidence-based and digitally enabled and enhance consumer engagement with their own health. This can be achieved through innovations like Alpowered risk stratification for proactive outreach, accessible self-sampling

and screening methods, and digitally-enabled community health support. Simultaneously, fostering greater consumer engagement involves creating streamlined access to care, broadening access to underserved populations and providing tailored support through Alenabled platforms. Specific examples of these interventions are in the Appendix and Figure 18 depicts innovations and interventions that can occur across the health ecosystem.

Make investments more effective

Through innovations & engagement

New innovations

- Risk stratified proactive outreach using AI & data
- Self-sampling & anywhere screening
- Community health navigators powered by digital postcode

More consumer engagement

- Faster access, less hassle
- Prevention build into daily life
- Greater access
- Personalised support
- Visible fairness

Figure 18. Key enablers powering the future of prevention1

Empowering individuals & communities	Workforce	Data & technology as a foundation	Shifting incentives to reinforce health promotion and protection	Policy & legislation incentives as key drivers
Digital literacy & accessibility Equipping both HCPs & citizens to navigate & benefit from digital prevention solutions, to avoid widening inequalities. Personalised health education Tailored content empowering all-aged citizens to make healthier choices and prioritise being well. Address social determinants of health (e.g., green spaces, transport, air quality, nutrition, housing, financial support). Local and hyperlocal solutions Leverage local knowledge and community assets to address unique health challenges faced by diverse communities.	Partners to boost capacity Multi-sectoral collaboration across all actors to address funding, resourcing and skills shortages when designing and implementing prevention interventions. Skills-first approach Training programmes and embedding public health competencies into vocational training across sectors. Cultural competency Tailoring health promotion to diverse cultural beliefs, practices, and languages for equitable access. Evaluating & building evidence Health systems learns and evaluates as it rolls out interventions (e.g. by conducting randomised clinical trials, modeling and observational evaluations).	Connected digital health records Seamless data sharing across the healthcare ecosystem for all patients. Improved information management Improving secondary use for existing health data and cohering it with new data. Al-powered health data analytics E.g., using data from an array of sources (genomics, consumer, EHRs) to tailor interventions. Public trust in wearables, Al tools and data sharing Improve data literacy and clarity around data ownership for consumers.	Incentivisation Rewarding citizens & HCPs for preventative measures that achieve health outcomes. Providing personal health promotion budgets for marginalised groups. Payment linked to care models Value based care models, rewarding providers for avoiding procedures and illness. Nudges Using behavioural insights to target clinicians, patients and populations via technology that delivers timeline nudges.	All Policies have a healthy element Enact taxes, laws and policies, across government that facilitate healthy health behaviors and equitable outcomes. Incentivise enterprises especially SMEs Reward them for promoting employee, and their family's, health (e.g., flexible work practices, mental health support and workplace wellbeing programmes). Demand signal to navigators Facilitate life sciences innovators to proactively prioritise preventative innovations-particularly for LTC. Dedicated budget line for prevention Across the healthcare services to prioritise prevention and avoid redirection to address sickness due to short term priorities.



The evidence is clear: investing in prevention is not a discretionary choice. It has become a fundamental economic and social imperative for the UK. The current treatment-centric model is unsustainable, placing immense pressure on the NHS and hindering the nation's productivity and wellbeing. Shifting towards a prevention-first health ecosystem offers a pathway to a healthier, more prosperous future.

We have demonstrated that early intervention across the course of life yields significant societal returns. For every £1 invested in preventative health measures, £9 of societal benefits can be realised, encompassing reduced healthcare costs, improved quality of life, enhanced productivity and broader societal savings. However, this potential remains largely untapped due to persistent underinvestment, short-term appraisal horizons, a narrow focus on benefits, and a critical mismatch between those who pay and those who benefit.

Realising the full potential of prevention demands a concerted, collaborative effort from all stakeholders across the health ecosystem. It requires moving beyond ambition to action, implementing a strategic, evidence-based approach.

What does this look like for stakeholders across the ecosystem?

For policymakers and government:

- Implement long-term funding mechanisms and appraisal frameworks that fully account for the multi-sectoral and long-term societal benefits of prevention, moving beyond short-term budget cycles.
- Consider health in all policy decisions, including increase investment in upstream social determinants of health such as education, housing,

- and environmental quality, recognising their profound impact on health outcomes.
- Create policy environments that encourage and reward cross-sector partnerships between the public, private and third sectors in delivering preventive initiatives.

For healthcare system leaders:

- Integrate preventive care across all clinical pathways, from primary care to specialist services, ensuring it is a core component of patient management.
- Empower integrated care systems (ICSs) to lead and implement localised, place-based prevention strategies tailored to community needs.
- Accelerate the adoption of digital tools, Al and data analytics to predict risk, personalise support, and enable proactive health management.

For businesses and employers:

- Invest in comprehensive employee wellbeing programmes, recognising the direct link between employee health and productivity.
- Actively promote healthy behaviours and provide access to preventive services, fostering a culture that values employee health as a strategic asset.

For technology providers and innovators in the health space:

- Develop and deploy cutting-edge digital health solutions, wearables, and Al-driven platforms that empower individuals and healthcare providers in proactive and personalised prevention
- Design solutions that are accessible and user-friendly, and address the needs of diverse populations, helping to narrow health inequalities

For communities and individuals:

 Actively engage with preventive health information, tools, and services to

- take greater ownership of personal wellbeing
- Support and participate in community-led initiatives that promote health and wellbeing, fostering a collective commitment to prevention

For non-profits:

- Champion lived experience and community voice to design and deliver prevention that reaches underserved groups
- Scale evidence-based, people-centred programmes via acting as a trusted convener through cross-sector partnerships

For the education sector:

- Embed prevention and wellbeing across curricula and campus life to build lifelong healthy habits
- Use schools and universities as hubs for early support, mental health, health literacy and community engagement

For retail and community organisations:

- Bring prevention to everyday settings through pharmacies, supermarkets, and local services
- Use consumer insights, such as purchasing trends, loyalty data, or seasonal health patterns, to target prevention campaigns and make healthy choices visible, accessible, and routine

By collectively addressing the barriers to investment and embracing a holistic life-course approach, we can unlock the immense societal value of prevention. This is not just about saving money: it is about extending healthy, productive lives, reducing health inequalities, and building a more resilient and productive nation where good health for all is a shared outcome.



Methodology: Review of Return on Investment literature

We undertook a targeted review of literature relating to the return on investment (ROI) associated with prevention at different life stages. The literature search primarily utilised Public Health England's (PHE) Health Economics Evidence Resource, supplemented by a targeted search

of academic papers and our existing literature review into working age mental health interventions.

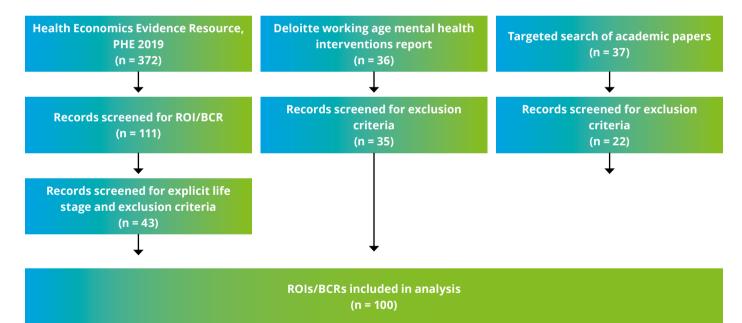
The following exclusion criteria were applied:

- Papers that did not include ROIs or benefit cost ratios (BCRs)
- Papers that were not related to a specific life stage

- Papers that did not require a subscription or payment to access
- Papers not related to OECD countries
- Papers detailing highly targeted interventions yielding exceptionally high ROIs.

Figure 1 illustrates the sample sizes and literature sources before and after the application of the exclusion criteria.

Figure 1. Literature review methodology



Sources: Deloitte analysis

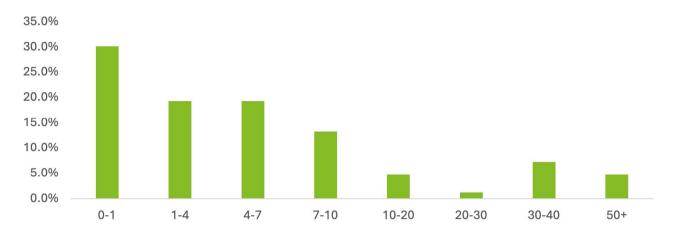
Following the application of the exclusion criteria, the remaining papers were categorised by their identified life stage and intervention theme, and the reported ROIs were averaged. To derive an average ROI for each life stage, the average ROI of each intervention theme was averaged, weighted by the prevalence of each theme.

The following themes of interventions were considered at each life stage:

- In-utero to 5 years: Vaccination, oral health, diet and exercise, social, mental health
- School and education: Screening, diet and exercise, sexual health, mental health
- Working age population: Genetics, Musculoskeletal conditions, diet and physical inactivity and weight management, mental health
- Older community and social care: Screening, vaccination, frailty/falls prevention, mental health

Studies varied in the length of appraisal period considered. Figure 2 below sets out the distribution of the reviewed literature by appraisal period bands:

Figure 2: Distribution of appraisal periods in the reviewed literature



Sources: Deloitte analysis

Our analysis is subject to limitations that warrant consideration. In particular, the search for ROIs primarily relied on PHE's existing Health Economics evidence Resource and is not an exhaustive search of the literature. Moreover, studies not specifically related to a life stage were excluded, which resulted in the omission of several high-quality studies.

Many studies focused on highly specific interventions in certain settings and locations. Consequently, the scalability of their reported ROIs is uncertain, given the location and setting dependency. There are also key considerations in the assumptions about the ROIs found in the reviewed literature:

 The average ROIs from the literature are assumed to be scalable to any level of investment. Given that ROIs are specific to location and setting, benefits may not increase in a linear fashion with spending on prevention and ROI may fall as investment scales up.

- The ROIs relating to productivity are derived from previous Deloitte research on the benefit to employers of preventive care spending. As such, the productivity ROI does not reflect a broad base of potential preventive interventions.
- Healthcare ROI is assumed to increase at a constant rate over time. However, it is likely that benefits are front loaded yielding greater returns in earlier years.
- In view of these caveats, our analysis is intended to provide an indicative estimate for the ROI of preventive interventions and is not an exhaustive and comprehensive analysis.

Methodology: Value of preventable mortality

To estimate the societal value of avoided mortality, we looked at data on mortality rates from preventable cases (age-standardised rate per 100,000 population aged under 75)²⁰.

Comparing the UK with its five closest European countries included in the dataset (Belgium, France, Germany, Ireland and the Netherlands) showed that a 7 per cent reduction in the UK's preventable mortality rate would be required to be in line with the average of these five countries.

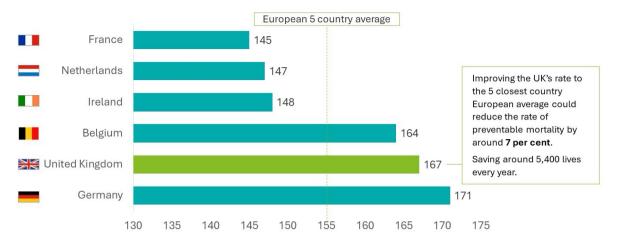


Figure 2: Mortality rates from preventable causes, age-standardisedrate per 100,000 population under 75

Only the five closest European countries are included in the comparison. Italy and Spain had rates of 128 and 134 respectively.

Sources: OECD Health at a Glance 2024, Figure 6.2

Applying a 7 per cent reduction in preventable mortality to the preventable deaths data for England and Wales in 2023³ would result in a ~5,400 lives saved in that year.

Appling data on quality-adjusted life expectancy by age band²¹ is used to estimate an average \sim 15 life years per death avoided. Applying a societal value of a QALY of £70,000 (in line with the HMT Green Book), indicates that this could have a societal value of \sim £6bn.

Case studies: increasing funding and making investments more effective

How to increase funding

To get more funding for prevention we need to reconsider the incentives for all ecosystem players to increase their funding, and we also need to add new funders and new funding models. Below we list some examples of the creative and collective measures needed to drive up investment.

Through new funding models

- Sustainable Development Goals (SDGs) Bonds: National 'debt-for-health' agreements¹³, redirecting funds towards long-term prevention initiatives that are aligned with the United Nations SDGs.
- Social impact venture funds: The MSD Impact Venture Fund¹⁴ mobilises private capital for innovative prevention models like digital diagnostics and maternal health technologies, delivering economic and societal value at scale.
- Private sector mission-led initiatives: Novo Nordisk's Cities for Better Health¹², aligning corporate goals with public health outcomes and consumer expectations of private sector businesses

· Through new funding

- Employers: Companies offering tailored wellbeing programmes and perks, recognising the ROI in healthier, more productive employees.
- Health insurance companies: Linking insurance premiums and rewards to healthy behaviours tracked via apps and wearables.
- Place-based / community initiatives: UK Marmot Places¹⁵, focusing on addressing the root cause of health disparities in specific regions or communities by creating local strategies that leverage existing infrastructure, community insights, and multi-sector partnerships to provide funding and resources.

Through new incentives

- Primary and secondary care incentives: Shifting incentives from volume-based payments and disease management targets towards outcome-based measures to motivate clinicians to prioritise proactive care, reduce avoidable hospitalisations and embed prevention across the healthcare system.
- Aligning employers with public health goals: Japan's Health and Productivity Management programme¹⁶, incentivising employers to invest in preventive health for greater productivity.

Make investments more effective

To benefit fully from the rise in investment and deliver on the opportunities for health improvement, consumers need to be more engaged with their own health and the selection of interventions needs to be evidence-based and digitally enabled.

Through new innovations

- Risk-stratified proactive outreach using AI and data: AI tools for CVD risk prediction to reduce the burden on frontline staff as well as enabling earlier detection of disease in the population.¹⁷
- Self-sampling and anywhere screening: NHS England HPV selfsampling pilots¹⁸, increasing cervical cancer screening uptake, particularly amongst 'hard to reach' populations that face cultural barriers to access screening.
- Community health navigators powered by digital protocols: Living Goods in Uganda¹⁹, empowering community health workers with digital tools to expand their reach and reduce mortality among the under-5s.

Through more consumer engagement

- Faster access, less hassle: Digital-first pathways and self-sampling reducing waiting times and simplifying access to preventive care.
- Prevention built into daily life: Employer wellbeing programmes and insurancelinked incentives integrating healthy choices into everyday routines.
- Greater access: Community-based and digital models extending prevention to historically under-served populations.
- Personalised support: Al and data providing tailored advice and health coaching at the right moment.
- Visible fairness: Equitable health opportunities becoming accessible to everyone, regardless of income or background.







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