



GIG
CYMRU
NHS
WALES

Iechyd Cyhoeddus
Cymru
Public Health
Wales

Polisi ac Iechyd Rhyngwladol

Canolfan Cydweithredol Sefydliad Iechyd y
Byd ar Fuddsoddi ar gyfer Iechyd a
Llesiant

Policy and International Health

World Health Organization
Collaborating Centre on Investment for Health and
Well-being

International Health Insights: **Approaches to Measuring and Growing** **Prevention Spend and Investment**

October 2026

Mae'r ddogfen yma ar gael yn y Gymraeg / This document is available in Welsh

Authorship, acknowledgements and contact information

This report is developed by the International Health Insights team at the Policy and International Health Directorate, a WHO Collaborating Centre on Investment for Health and Well-being, Public Health Wales.

Authors and contributors

Serena Ryan*, Keira Charteris, Emma Begley, Mariana Dyakova, Daniela Stewart, Zuwaira Hashim, Brendan Collins

**Maastricht University*

Special thanks to the Science Research Evidence Division and Joanna Davies, Head of Health Economics, Advanced Analytics and Policy Modelling at Welsh Government for their input. We are grateful to Sumina Azam, National director for Policy and International Health and Ciarán Humphreys, Head of Wider Determinants of Health at Public Health Wales for their helpful feedback.

Contact

Mariana.Dyakova@wales.nhs.uk

What are International Health Insights?

These reports draw on international policies and best practice, evidence, and guidance, providing actionable intelligence to inform and strengthen public health and the care system in Wales.

Originally launched during the COVID-19 pandemic in 2020 (known as International Horizon Scanning), the report series supported Wales's dynamic public health response and recovery. Since 2022, the scope has expanded to cover a broad range of emerging and priority health topics, commissioned by key stakeholders such as Welsh Government and NHS executive bodies.

This work is part of Public Health Wales' wider systematic approach to intelligence gathering and evidence translation into policy and practice, supporting coherent, inclusive, and evidence-informed action, which progresses implementation of the Wellbeing of Future Generations (Wales) Act and A Healthier Wales strategic plan towards a healthier, more equal, resilient, prosperous, and globally responsible Wales.

Disclaimer: The reports provide a high-level summary of international learning only. Using a World Health Organization (WHO) rapid review methodology, they provide a snapshot of the latest evidence, policies, practical approaches, real-life experiences and examples from selected countries, and guidance from key global organisations. The reports are not comprehensive and are not aimed at providing an in-depth evidence review, analysis or quality assurance. Drawing on scientific and grey literature, they include the sources of information to allow further exploration.

Contents

Authorship, acknowledgements and contact information 2

1. Key messages 4

 Table of abbreviations 6

2. Measuring prevention spend..... 8

3. Mechanisms for shifting budgets towards prevention 10

4. Country insights 16

 South Korea 16

 Germany..... 16

 Estonia 17

 Finland 18

1. Key messages

Why it matters

Despite the **huge health, societal and economic burden of preventable disease**, and the **high value** preventative interventions deliver, **underinvestment in prevention remains a persistent challenge**.

- Health systems continue to devote a **small proportion of healthcare spending to preventative (public health) interventions**, averaging at 3.4% across the Organisation for Economic Co-operation and Development (OECD) countries in 2025.
- Preventative (public health) interventions bring **high value for money** in terms of health outcomes (such as, prevented premature deaths and increased life expectancy), improved population and societal well-being, reduced public services demand, increased health system resilience, and contribution to the wider economic prosperity and sustainability.
- This **gap is becoming more critical** as Europe (including Wales) faces growing challenges, such as population ageing, rising chronic disease, widening health inequalities, and climate change.

Key findings

1. Inconsistent definition and fragmented measurement

- There is **no universally agreed definition** of prevention, it varies across countries and measurement approaches.
- The **System of Health Accounts (SHA) 2011** framework is the dominant international reference, but it is inconsistently applied across countries.
- **Cross-sectoral prevention spending** in education, housing, transport, and social protection is **usually excluded** from health accounts, resulting in a **substantial underestimation** of spending.
- Without consistent measurement, policy makers **lack robust data to benchmark** spending and investment or make a credible case to budget holders and funders.

2. Barriers for investing in prevention include:

- **Misalignment** between political and budget cycles, prevention timescales, structural/ system incentives and stakeholder priorities are driving **short-term thinking and funding allocation**.
- Prevention is particularly **vulnerable to fiscal austerity and spending cuts**, usually shaped by political decision-making.
- **Limited cross-sector buy-in, inclusion in measurement, evidence and recognition** of the wider prevention outcomes, returns and value for money.

3. Mechanisms for protecting and increasing prevention spend

- **Structural fiscal/ budget protection** is a prerequisite for sustained long-term stability.
- **Fiscal and governance** mechanisms are increasingly applied, including:
 - ✓ **Hypothecated (earmarked) taxation** - dedicating the revenue from a specific tax for a particular expenditure purpose
 - ✓ **Ring-fenced budgets** – dedicated/ protected budget lines for prevention
 - ✓ **Outcome-based financing and impact investment** – pay-for-success models and social impact bonds
 - ✓ **Supranational mandatory allocations** – fixing minimum spend at a donor / legislated level
 - ✓ **Expanded valuation frameworks**, capturing wider societal and economic returns to strengthen the evidence, recognise and attract cross-sector financial contribution.

Country insights

Country examples highlight four different mechanisms for shifting budgets towards prevention:

- **South Korea's municipal tobacco tax earmarking** has provided stable ring-fenced health promotion funding through a City Council resolution (*see page 16*).
- **Germany** has established **legislated minimum spending obligations** on sickness funds, stopping decline and setting a **floor for prevention investment** (*see page 16*).
- **Estonia's multi-stakeholder advocacy** movement has secured legislative expansion of the Health Insurance Fund revenue, demonstrating that **sustained, cross-sector coalitions aligned with finance ministry priorities** can overcome financing gaps (*see page 17*).
- **Finland's ring-fenced model** has provided over **30 years of stable health promotion funding**, showing the value of **dedicated revenue streams and proactive planning** for revenue base erosion. It also uses a **wide range of indicators to measure and inform prevention spend** (*see page 18*).

Implications for policy and practice

- An **urgent action** is required to ensure **growth and sustainability of prevention spend and investment** to save lives, improve people's well-being, reduce health and public service demand and inequalities, and deliver wider economic and societal returns.
- Establish a **harmonised nationwide measuring framework**, interoperable with SHA 2011, to enable robust cross-government benchmarking. This could capture both a 'narrow' (health system) and a 'broad' (cross-sector) measure of prevention spending.
- **Expand the scope of prevention accounting** to capture cross-sectoral investment (e.g. education, housing, social protection, etc.), strengthening the evidence available for investment decisions.
- **Greater efficiency in how public resources are allocated** is essential, as well as **mobilising complementary forms of financing** through greater engagement with development banks, philanthropic organisations, ethical investors and socially responsible businesses.
- **Apply a cross-cutting governance approach**, such as the *World Health Organization (WHO) Five Argument Framework*, linking prevention spend to health needs, societal co-benefits, fiscal sustainability, system capacity, and public preferences.
- Establish **ring-fenced prevention budgets and/ or earmarked taxation with statutory protection from reallocation** and **built-in contingency for revenue base erosion**. This should maintain spend when tax receipts are lower or offset spending cuts in a recession.
- **Embed prevention within medium-term budget frameworks** that protect prevention spending and investment across political cycles.
- **Apply novel funding instruments** that attract additional resources from, and share risk with, the private and philanthropic sectors through Impact / outcomes-based investment.
- **Adopt broader economic valuation frameworks**, including *distributional cost-effectiveness analysis (DCEA)* and *Social Return on Investment (SROI)*, to capture the wider societal, economic, environmental and inequality outcomes that could strengthen and incentivise investment.
- Prioritise investment in evidence-based preventive interventions that deliver **the greatest health impact and value for money**, drawing on approaches, such as the *WHO Best Buys*, while remaining **responsive to changing patterns** of risk factors and disease burden over time.
- It is worth noting that some examples of preventative policies and financing may fall **outside the devolved powers of the Welsh Government**, such as taxation policies.

Table of abbreviations

Acronym	Definition
WHO	World Health Organization
NCDs	Non-Communicable Diseases
OECD	Organisation for Economic Co-operation and Development
EHIF	Estonian Health Insurance Fund
CEA	Cost-Effectiveness Analysis
DALY	Disability-Adjusted Life Year
ECEA	Extended Cost-Effectiveness Analysis
EU4Health	EU Health Programme 2021–2027 (€4.4 billion total; mandatory 20% prevention allocation)
GDP	Gross Domestic Product
GKV	Gesetzliche Krankenversicherung (German Statutory Health Insurance)
HC.6	System of Health Accounts 2011 functional code for Preventive Care
HiAP	Health in All Policies
Morbi-RSA	Morbiditätsorientierter Risikostrukturausgleich (Germany's morbidity-based risk adjustment mechanism for statutory health insurance funds)
NCD	Non-Communicable Disease (singular); see also NCDs
NHS	National Health Service (United Kingdom)
NPK	Nationale Präventionskonferenz (National Prevention Conference, Germany)
PHW	Public Health Wales
QALY	Quality-Adjusted Life Year
ROI	Return on Investment
SDIL	Soft Drinks Industry Levy (United Kingdom, introduced 2018)
SGB V	Sozialgesetzbuch Fünftes Buch (Social Code Book V, Germany – governs statutory health insurance)
SHA	System of Health Accounts (joint WHO-OECD-Eurostat framework for classifying health expenditure)
SHI	Statutory Health Insurance (used in Germany/Bismarckian systems)
SROI	Social Return on Investment
STEA	Funding Centre for Social Welfare and Health Organisations (Finland)
THL	Terveystiete ja hyvinvoinnin laitos (Finnish Institute for Health and Welfare)

Introduction

Scope and focus

This report summarises **international evidence and practical approaches** on measuring, protecting, and increasing expenditure on prevention.

- It takes a **systems approach**, recognising that structural and political barriers drive underinvestment in prevention and are equally part of the solution.
- Evidence is synthesised around two key areas: **measuring prevention spend; and mechanisms for protecting and shifting budgets towards prevention.**
- **Practical implementation** is featured in four countries: **South Korea, Estonia, Germany, and Finland.**

Methodology: systematic rapid evidence review using scientific and grey literature (ie policy databases); and country case studies, selected in terms of relevance to the Welsh context and evidence availability.

Why is this issue important?

Scale of the problem – preventable (premature) deaths are a huge global and European burden.

- Non-communicable diseases (NCDs) caused an estimated 43 million deaths globally in 2021, accounting for around three-quarters of all non-pandemic related deaths¹. About 18 million NCD deaths occurred prematurely, i.e. among people younger than 70 years of age¹.
- Over 50 years, at least 150 million deaths have been prevented by vaccines², however many deaths from vaccine-preventable diseases could be prevented still.
- Approximately 1.8 million NCD-related deaths per year are avoidable in the WHO European Region, with 60% preventable through risk factor reduction and public health interventions².
- The COVID-19 pandemic led to at least 14.8 million excess deaths globally³ and at least \$15 trillion in economic costs in the US alone, highlighting the value of having a strong public health and health security system⁴. Mortality was much higher in people living in poverty or people with preventable risk factors like smoking and obesity⁵. At least 2 million people died from COVID-19 in the WHO European Region alone⁶.
- Wales faces a similar preventable burden, with cardiovascular disease, cancer, respiratory conditions, and type 2 diabetes accounting for the majority of premature mortality⁷.

The underinvestment challenge

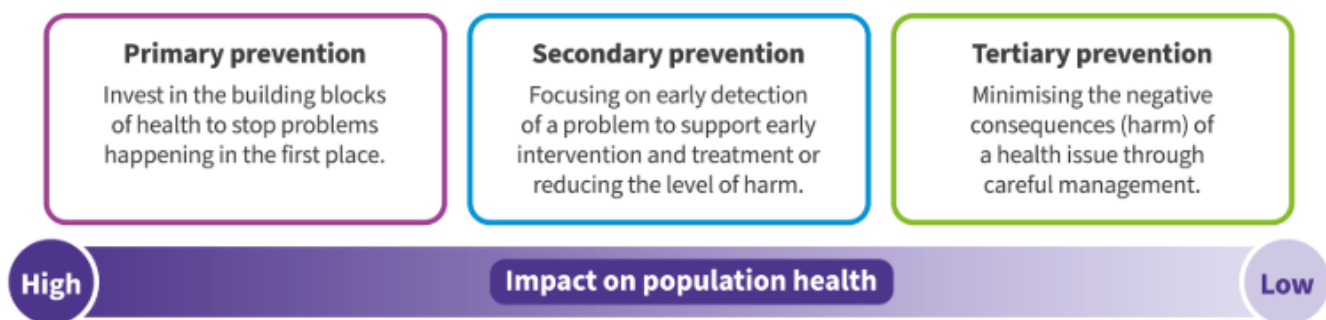
- Prevention has historically represented a **small share of the total health system expenditure**, averaging 3.4% across OECD countries (between 3% and 7%) in 2025⁸.
- The International Longevity Centre suggests that **increased investment in prevention can boost average life expectancy by three years**⁹, such as in the example of Canada¹⁰.
- **Key barriers** include insufficient political mandate, short electoral/ budget cycles, misaligned incentives across stakeholders, inconsistent measurement and benchmarking, diffused returns across sectors; stronger advocacy/ lobbying for urgent and curative services; and in some health system architectures, financing mechanisms actively penalise investment in prevention¹¹.

2. Measuring prevention spend

Defining prevention

- The definition of prevention is **not universally agreed and varies** across countries.
- The **World Health Organization (WHO)** defines prevention as *a set of specific population-based and individual-based interventions aimed at reducing the burden of disease and associated risk factors*¹².
- **Prevention levels** are defined according to targeting **different stages in the disease process**, which vary in definitions. Overall, they include *primary (sometimes including health promotion / primordial prevention), secondary and tertiary* prevention activities (Figure 1)^{13,14}.

Figure 1. Public health approach to prevention¹³



In **Wales**, prevention is understood as **more than preventing disease**. The Welsh Government and the Future Generations Commissioner for Wales agreed on a definition which considers working in partnership and building on the strengths and assets of people and communities¹⁵.

This report uses the **WHO** definition of prevention in health, encompassing primary and secondary prevention explicitly linked to health system expenditure, financing, or budgeting.

Measuring prevention

- **No single consistently applied measurement** approach exists internationally. The **Six most common approaches** have been identified (*Table 1*).
- The **System of Health Accounts (SHA) 2011 framework** is a joint OECD, Eurostat and WHO system for classifying and comparing health expenditure and is the most widely used.
 - ✓ Its application varies across countries and studies.
 - ✓ Standard SHA reporting does not fully capture the breadth of prevention related activity, supplementary modules (i.e. additional guidance and reporting categories) are needed to capture the full breadth of prevention spending^{16,17}.
- Multiple approaches **fragment the evidence base**, limiting comparisons between countries, systems and studies¹⁸.
- **Many widely cited prevention frameworks** focus on demonstrating value and return on investment (ROI) rather than measuring actual prevention expenditure^{19,20,21}.
- Measurement systems struggle to capture prevention-related spending outside the formal health sector, potentially leading to **systematic underestimation of prevention investment**²².
- The growth of **proxy and local measurement approaches** emerged in response to a lack of comprehensive national prevention expenditure data²³.

- Overall, emerging evidence suggests that a **trade-off exists between international comparability and comprehensiveness**. For example, the SHA framework enables cross-country comparison but excludes cross-sectoral spending; while proxy and intervention-specific approaches capture a fuller picture but are equally not comparable across systems.

Table 1. Approaches to measuring prevention spend.

Framework / Tool	Scope	Key Limitation
1) System of Health Accounts (SHA, 2011, HC.6) A joint WHO-OECD-Eurostat framework for classifying health expenditure by function. Prevention is captured under functional code HC.6 (Preventive Care), encompassing immunisation, early detection, health monitoring, counselling, epidemiological surveillance, and disaster preparedness ^{18,20}	Internationally recognised, multi-country, standardised	Excludes cross-sectoral spend
2) National Accounting & Administrative Data A system-level measurement approach that uses routine expenditure and health financing datasets from national and international agencies to quantify prevention spending and analyse expenditure trends across jurisdictions ^{9,20}	Multi-country OECD	Not interoperable across systems
3) Sub-national & Proxy-based Approaches A measurement approach that derives estimates of prevention expenditure from local authority budgets, programme spending data or alternative proxy indicators where standard prevention accounting data are unavailable ^{25,26, 27, 28}	UK & US local governments	No cross-national comparability
4) Economic Modelling & Cost Effectiveness Analysis An analytical approach that estimates the costs, outcomes and cost-effectiveness of preventive interventions using primary data, economic modelling techniques, or a combination of both, rather than measuring aggregate prevention expenditure directly. Economic modelling is often used to project long-term outcomes or address data gaps and may also include assessments of budget impact ^{29, 30, 31}	Intervention level measurement	Not applicable to system level
5) Investment Case Frameworks, such as ROI A valuation approach that assesses the economic returns and wider benefits of preventive interventions to support decision-making and advocate for greater investment in prevention ^{9, 32, 31}	Programme-level measurement & advocacy	Quantifies returns, not actual spend
6) Cost of Illness (COI) studies They measure the total economic burden of a specific disease or health condition on society, including direct medical and non-medical care costs (e.g. payments for hospital stays, doctor visits, prescription drugs, etc.); indirect costs (value of resources lost due to the illness, primarily through missed work or premature death); and intangible costs (i.e. hard-to-measure personal impacts like pain, grief, and emotional suffering) ³³ .	Disease/condition level measurement	Not applicable to system level

3. Mechanisms for shifting budgets towards prevention

The international evidence could be summarised around **six mechanisms** that advocate for, protect or increase expenditure and investment on prevention (Figure 2) ^{16, 24, 25}.

Figure 1. Mechanisms for shifting budgets toward prevention



WHO has identified a range of financial instruments, contracting mechanisms and fiscal approaches as potential solutions to fund preventative interventions²⁴:

- **Taxation policies** can play various roles from raising revenue to addressing the determinants of health and shaping economic activity to promote health and well-being.
- Governments may also choose to look to **private and philanthropic capital**, such as impact investing, to complement public funding.
- An **appropriate mix of investment instruments** can provide **sustainable funding for high-quality, accessible health and wider public services** and enable a shift to prevention.

Fiscal and structural instruments

International evidence suggests that the most effective prevention financing approaches are those that combine **evidence-based population health interventions** with dedicated funding mechanisms, such as **earmarked taxation (hypothecated revenue)** or **protected budgets**^{9,17,20,24,25}.

Earmarked taxation

- Fiscal instruments (i.e. hypothecated revenues) are recognised as effective because they function **both as prevention interventions** (e.g. discouraging unhealthy behaviour) and as **financing tools** (e.g. generating health prevention revenue).
- When revenue is **legally earmarked for disease prevention/ health promotion**, these mechanisms can also provide a **protected source** of prevention funding. Examples include South Korea's municipal tobacco tax model¹⁷ and Finland's STEA/Veikkaus model²⁸ (*see case studies*).
- Evidence is particularly strong for **taxes on tobacco, alcohol, and sugar-sweetened beverages**:
 - ✓ Tobacco tax increases can reduce smoking prevalence and generate substantial additional revenue for governments, especially in lower income settings²⁶. Increasing **cigarette excise taxes by \$1 per pack** could increase tobacco **tax revenue by 47%**, while also reducing smoking prevalence²⁶. In the Philippines, **tax tobacco reform** generated a **114% increase in revenue**, of which 85% was used for universal health coverage²⁶.
 - ✓ Similarly, a **"double dividend"** is associated with a **10% increase in UK alcohol duty**, generating both health gains and economic benefits when revenues are recycled into public expenditure²⁷.
- **Revenue-based vulnerability is a key structural risk**. Evidence from South Korea and Finland demonstrates that the **associate revenue may decline**, due to anti-smoking or gambling harm policies being successful, requiring governments to **proactively plan** for alternative revenue streams^{17,28}.
- However, fiscal instruments could present a **risk that revenue becomes a disincentive** for prevention over the years, demonstrated by the UK tobacco control³⁵.

Ring-fencing and budgetary protection^{17, 24}

- Ring fencing is the **legislative or administrative protection of dedicated prevention funding** from reallocation to curative services, providing greater security for long-term planning and investment.
- It is recognised as the **most direct structural response** to the systematic underfunding of prevention budgets. This is supported by evidence from **tax-funded systems that sustain higher prevention spending** than social health insurance systems¹⁶.

- Germany demonstrates how **legislated minimum spending requirements** can support higher levels of prevention expenditure - the highest share in the EU at 7.9% ³⁶ (*see case study*).
- However, **ring-fencing alone does not guarantee sustained investment and can erode** under sustained fiscal pressures.
- Evidence from 25 OECD countries suggests that prevention spending remains **vulnerable during fiscal consolidation** (a set of government policies aimed at reducing budget deficits through spending cuts, revenue increases, or both), particularly where budgets are not protected in real terms. This reflects the **long-term nature of prevention spending** where benefits are often diffuse and delayed, and therefore **politically easy to deprioritise and reduce** ¹⁵.
- **The OECD recommends complementary approaches**, including **medium-term budget frameworks** (multi-year financial planning) and **capital budgeting arrangements** (planning and financing long-term investments), to protect prevention investment across political and economic cycles ³⁷.
- Modelling studies indicate that, in the absence of structural protection, increases in curative sector funding, including well-intentioned donor allocations, can **paradoxically strengthen** curative sectors political influence, enabling it to lobby for a greater share of government health spending at the expense of prevention ¹¹.

Governance and advocacy mechanisms

Governance and advocacy mechanisms build an **evidence- and value-informed 'Health in All Policies' approach and advocacy across government sectors**. They recognise and promote the close interdependency between population health and well-being, prevention interventions and their outcomes and returns on investment in other sectors, such as education, transport, housing, and the wider economy.

Cross-sectoral and multisectoral budgeting ^{23, 24, 25, 28}

- These are exemplified by **pooled funds, braided funding streams** (combining funding streams to support common objectives while preserving independent oversight), and **cross-departmental accountability**, used to capture prevention-relevant spending that falls outside conventional health budgets.
- These could include **well-being budgeting or bundles of cross-departmental funding** targeted to key cross-cutting priorities, such as poverty, as well as local authority pooled funding.
- Evidence is mostly national and not yet standardised internationally.

Building the economic / investment case

Prevention is a high-value investment with evidence consistently showing that it can deliver substantial health, societal, economic and environmental co-benefits. This advocacy approach is the most used internationally.

- Public health interventions have shown an overall return on investment (ROI) of 14.3 to 1 ³⁸.
- In England, public health grant spending generates three to four times more health gain per pound than equivalent NHS treatment spending ³⁹.
- Its influence is limited where savings and returns accrue to a different budget holder than the one who has financed/ asked to invest. For example, health sector savings vs. local government spend; or wider cross-sector savings and returns (i.e. productivity, employment) vs health sector spend ^{38, 20, 16, 40}.

- Advanced advocacy includes not only traditional economic approaches, e.g. cost-effectiveness and cost-benefit analyses (CEA/ CBA) and ROI, but expands to including equity and wider societal value, such as through **Distributional Cost Effectiveness Analysis (DCEA)**⁴¹. This assesses how the costs and benefits of an intervention are distributed across different social groups; and **Social Return on Investment (SROI)** that measures wider societal, economic and environmental outcomes and returns⁴².

Funding and investment mechanisms

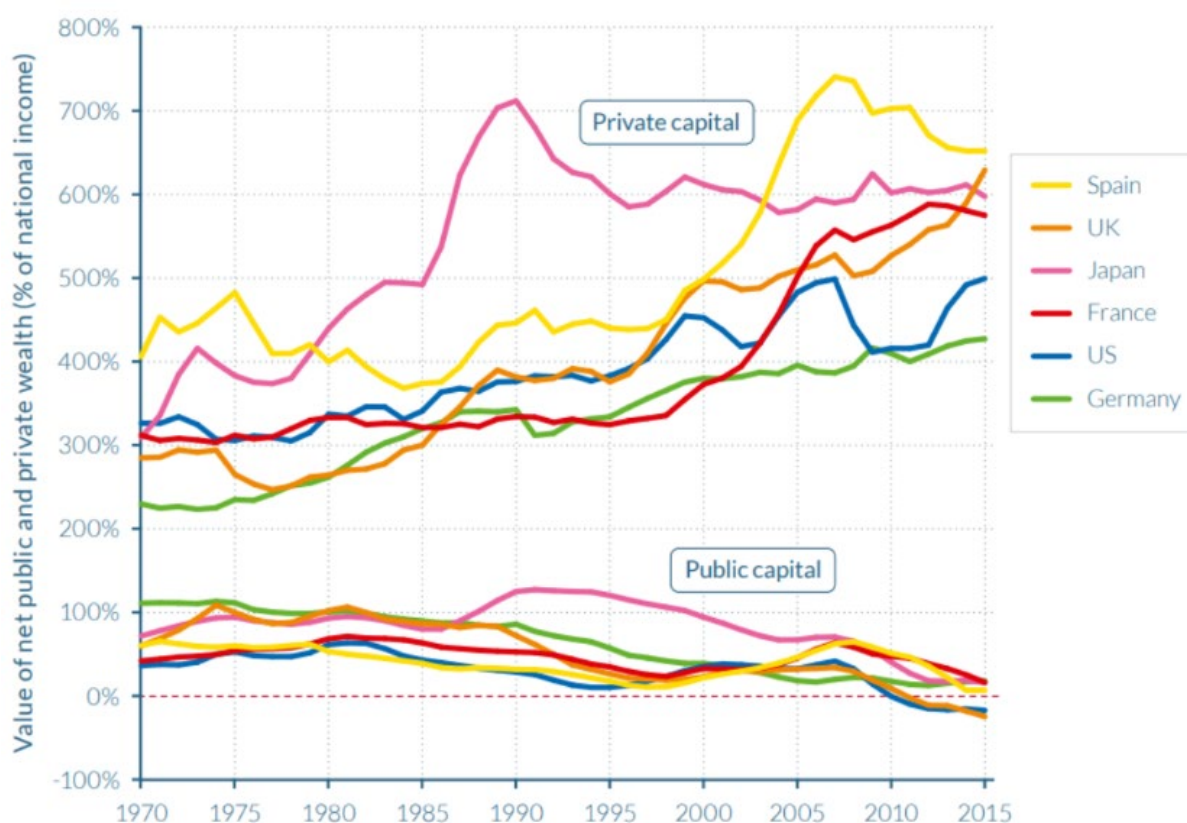
There is a growing recognition that **tackling complex well-being and social challenges requires mobilising a broader range of financial resources alongside public investment**.

- While **public investment remains fundamental**, there is simply **not enough** public money available to meet current and future needs.
- The **gap between available public capital and the scale of private capital** in the economy continues to widen (*Figure 2*)⁴³.
- European governments have been spending around €1,000 less per person annually on education, health and social care than they would have, following the austerity measures related to the 2008 financial crisis⁴⁴.

There is a critical need for **both greater efficiency in how public resources are allocated**, as well as for **mobilising complementary forms of financing** through greater engagement with development banks, philanthropic organisations, ethical investors and socially responsible businesses⁴⁵.

Novel dedicated funding and investment for prevention instruments include outcome-based financing (social impact bonds), supranational mandatory allocations (e.g. EU4Health's 20% prevention requirement), and diversified investment models^{46, 47, 48}. Most of these **need longer-term evaluation** to understand the outcomes and impacts generated.

Figure 2. Net private wealth and net public wealth to national income ratios in rich countries, 1970–2015⁴³



Outcome-based and social impact financing^{24, 25, 49}

- **Social impact bonds and pay-for-success models** are an emerging financing structure, in which private or philanthropic investors (or both) provide upfront capital for evidence-based prevention programmes.
- **Investors are repaid**, with interest, from the cost savings those programmes go on to generate. This transfers and shares financial risk from government/ public bodies to the private and philanthropic sectors.
- This model allows prevention investment to proceed **outside the constraints of annual public budget cycles** that are negotiated year-on-year through public governance cycles.

Supranational mandatory minimum allocation

- Some donor/ international funding models set a **minimum share of a budget** that must be spend on prevention, rather than leaving this to discretionary annual decisions.
- **The EU4Health Programme** (2021-2027, €4.4 billion total) requires that at least 20% of its budget be allocated to health promotion and disease prevention⁴⁷.
- A comparable model was proposed in the US: **a dedicated Public Health Infrastructure Fund** providing \$4.5 billion per year in mandatory federal funding that replaced the historically unstable discretionary public health funding⁴⁷.
- By **fixing minimum spend** at a supranational or legislated level, this approach insulates prevention budgets from the annual political and fiscal negotiations that discretionary funding is often exposed to.

Through the Horizon Europe **Invest4Health project**⁵⁰, a **Guide for Financing Prevention and Health Promotion**⁵¹ was developed outlining **alternative financing approaches and practical tools**:

- It sets out how to build the case for prevention with funders, compares different financing models, and gives step-by-step guidance for putting them into practice.
- It shows that no single mechanism works for every context: governments and organisations need to weigh their own objectives, partnerships and capacity to choose the right approach.

What works for preventing key NCDs risk factors

- Interventions targeting major NCD risk factors demonstrate favourable returns compared with treatment-focused spending^{38,19,39}.
- WHO provides a list of highly cost-effective interventions - **"best buys"** to address NCDs⁵².
- The WHO Regional Office for Europe has also **defined and recommended** NCD "quick buys" that are proven, highly cost-effective interventions delivering measurable public health impact within 5 years (*Figure 3*)⁵³.
- The strongest evidence relates to interventions **reducing exposure** to the leading behavioural **risk factors for NCDs**, including tobacco use, harmful alcohol consumption, physical inactivity, and unhealthy diets (Table 2)^{1, 26, 27, 30}.

Table 2: Key NCD risk factors and effective prevention financing interventions

Risk factor	Prevention policy / financing interventions
Tobacco use	Tobacco excise taxes earmarked where possible to prevention; smoke-free legislation; mass-media cessation campaigns. Exemplified by South Korea and the Philippines' sin tax reform.
Physical inactivity	Active travel infrastructure investment - ring-fenced transport and planning budgets; exercise-on-prescription schemes; school sport grants; workplace wellness programmes; cross-sectoral budget pooling across health, transport and local government.
Harmful alcohol use	Alcohol duty increases, hypothecated to health where feasible; minimum unit pricing (as enacted in Scotland 2018 and Wales 2020); marketing restrictions.
Unhealthy diet and obesity	Sugar-sweetened beverage levies, e.g. UK Soft Drinks Industry Levy, 2018, with revenue ring-fenced for school sport and breakfast clubs; food reformulation policies; front-of-pack labelling; restriction of unhealthy food marketing to children; planning restrictions on fast-food outlets near schools ³⁰ .

Figure 3. 25 quick buys with measurable impact in less than 5 years ⁵³

less than 1 year

-  **Reducing tobacco use**
- 100% smoke-free public and work spaces
 - Increase excise taxes and prices
 - Pharmacological interventions

-  **Reducing alcohol consumption**
- Increase excise taxes
 - Bans on alcohol advertising
 - Restrictions on availability

-  **Promoting healthier diets**
- Front-of-pack labelling

-  **Increasing physical activity**
- Brief counselling intervention on physical activity in primary health care

-  **Reducing the cancer burden**
- HPV vaccination
 - Cervical cancer screening
 - Early breast cancer diagnosis programmes
 - Early cervical cancer diagnosis programmes

-  **Tackling chronic respiratory diseases**
- Acute treatment of COPD exacerbations with inhaled bronchodilators and oral steroids

-  **Tackling cardiovascular diseases**
- Pharmacological treatment of hypertension in adults
 - Treatment of myocardial infarctions with acetylsalicylic acid
 - Treatment of strokes with intravenous thrombolytic therapy

-  **Tackling diabetes**
- Glycaemic control
 - Statin use in people with diabetes >40 years old



NCD quick buys with measurable impact in 2–3 years

-  **Reducing tobacco use**
- Large graphic health warnings along with plain packaging
 - Advertising, sponsorship and promotion bans

-  **Reducing alcohol consumption**
- Brief interventions for persons with hazardous and harmful use

-  **Promoting healthier diets**
- Food reformulation

-  **Tackling diabetes**
- Control of blood pressure in people with diabetes

NCD quick buys with measurable impact in 3–5 years

-  **Promoting healthier diets**
- Behaviour change communication

-  **Tackling diabetes**
- Screening for albuminuria and treatment for angiotensin-converting enzyme inhibitor

4. Country insights

South Korea

System and policy context

- South Korea operates a **national health insurance system** - a mandatory social health insurance model with a single insurer, covering the entire population.
- Municipal (local) governments retain authority over **local tax revenues**.
- Health promotion is embedded within the **National Health Plan** and has pioneered **sub-national prevention financing** through a dedicated municipal programme.

Key intervention: Earmarked Tobacco Tax, the Wonju Healthy City Fund ⁵⁴

- The Wonju Healthy City Project is a local health promotion initiative that explicitly links **sin tax revenue to population health** investment.
- In October 2005, the **Wonju City Council passed a resolution** dedicating all revenue from the local tobacco consumption tax (~26% of the retail price) to the Wonju Healthy City project.
- Funds were allocated **across four programme domains, creating a formal ring-fence** without requiring new taxes:
 - ✓ Health promotion (lifestyle improvement, chronic disease management, smoking cessation, exercise infrastructure)
 - ✓ Healthy environments (accident prevention, green city)
 - ✓ Healthcare access (free health checks for low-income families, elder care, communicable disease prevention)
 - ✓ Health industry development
- Revenue was ring-fenced by a **local resolution** rather than national law, requiring re-legislation at each mayoral transition. A city Steering Committee oversaw annual allocations and delivery.

Germany

System and policy context

- Germany has a **decentralised funding structure**, with governance responsibilities shared across federal and state governments.
- Prevention is embedded in the statutory health insurance (GKV) framework.
- Germany operates a **statutory health insurance system** (GKV) - a multi-payer insurance model with 73 competing sickness funds. It contains a morbidity-based risk adjustment mechanism (Morbi-RSA), under which sickness funds receive payments based on the health profile of their insured population.
- Evidence suggests this can create a **financial disincentive for prevention** investment, as funds with healthier members may receive lower risk-adjusted transfers than those with higher levels of illness⁵⁵.

Key intervention: Legislated minimum spending obligations

- The **2015 Prevention Act (Präventionsgesetz)** legislated **minimum annual prevention spending obligations on sickness funds (per insured person)**, following a decade of failed legislative attempts⁵⁵.
- Since 2016, the National Prevention Conference (NPK) has coordinated cross-sector federal framework recommendations across **three life-course settings** including, schools (childhood), workplaces (working life) and municipalities (day-care centers and nursing homes - aging).
- This covers €7 per insured person per year, with sub-targets of €2 for settings-based interventions and €2 for workplace health promotion.
- Funds also collectively contribute €500 million annually to a National Health Fund supporting local and regional projects.
- The act also expanded **early detection** examinations across all age groups and strengthened vaccination provisions.
- This ensures **predictable, mandated funding** for health-promoting services rather than discretionary allocation by individual sickness funds driven by financial incentives.
- Following this, Germany now records the **highest EU prevention spending share** at 7.9%³⁶.

Estonia

System and policy context

- Estonia operates a **social health insurance system**, funded primarily through an earmarked social payroll tax channelled through the Estonian Health Insurance Fund (EHIF).
- Revenue base narrowly tied to wages, leaving the fund exposed to demographic and labour market pressures.
- Persistent EHIF deficits since 2013, reaching €29.6 million by 2016, were driven by population ageing and reliance on payroll contributions.
- A decade-long multi-stakeholder advocacy campaign, built around a five-argument framework targeting the Finance Ministry, secured legislative reform to broaden the funding base²⁰.

Multi-stakeholder advocacy to expand the state health budget²⁰

A long-term advocacy effort led by the Ministry of Social Affairs and wider cross-sector partners helped secure legislative reform in 2017.

- Stakeholders adopted a consistent five-argument framework centred on health need, societal benefits, fiscal sustainability, system capacity and public legitimacy.
- Importantly, the case was framed around government and finance ministry priorities rather than health outcomes alone.
- The campaign united government bodies, EHIF, healthcare professionals, patient representatives, and international partners, maintaining a consistent message and evidence base over more than a decade despite changes in political leadership.
- Advocates demonstrated that failure to reform health financing would create larger long-term fiscal pressures, positioning investment as a solution to future costs rather than an additional expenditure.
- The approach was highlighted by WHO as a model for cross-government health financing advocacy.

Estonia showcases that securing long-term investment in health and prevention require more than economic evidence alone. Success was achieved through sustained advocacy, strong cross-sector partnerships and aligning health objectives with broader fiscal and political priorities.

Key intervention: EHIF Revenue Reform²⁰

- Amendments to the Health Insurance Act in 2017 introduced state budget transfers for non-working pensioners. These are government payments made into the EHIF on their behalf, since pensioners do not pay the payroll-based social tax that fund the system. This broadens the EHIF funding base and improving long-term financial sustainability.
- Transfers were phased in incrementally through 2022 and legislated via amendments to the Health Insurance Act.
- This was the most significant structural change to Estonian health financing since the 1990s, with state transfers growing from 7% of EHIF revenue in 2018 to 13% by 2022, albeit longer-term sustainability pressures linked to Estonia's aging population remain⁴⁸.

Finland

System and policy context

- Finland has a population of 5.5 million and an ageing population with a growing burden of chronic diseases, including cardiovascular disease, cancer, mental health and musculoskeletal conditions.
- Despite this, **preventable and treatable mortality rates remain below the EU average**, reflecting strong long-term investment in prevention. This includes the North Karelia Project, which reduced cardiovascular disease mortality by 73% over 25 years.
- Finland has a **tax-funded universal health system**, with around 80% of health expenditure publicly financed. Since January 2023, health services have been organised through 21 wellbeing service counties, while municipalities retain responsibility for public health and health promotion.
- The country is also a **leading EU investor in preventive care**, allocating 6.4% of total health expenditure to prevention in 2022, the third-highest share in the EU³⁶.

Key interventions

Revenue Hypothecation and Transition to General Budget^{21,28}

- Finland's prevention funding has been historically supported through a standalone state aid authority under the Ministry of Social Affairs and Health - the **Funding Centre for Social Welfare and Health Organisations (STEA)**.
- Under the Lotteries Act (2001), Finland **legally earmarked gambling revenues** from its state gambling monopoly "Veikkaus Oy" for health and wellbeing purposes.
- This provided stable, ring-fenced funding for health promotion, disease prevention, and social welfare through STEA, distributing **over €400 million annually** at its peak.
- STEA has been distributing **multi-year grants** via transparent application and assessment processes. It processes approximately 2,500 funding applications annually to 1,600–1,700 health and social welfare targets, run by around 800 organisations.
- **Since 2024, this funding has been transferred to the general state budget** to maintain investment while **reducing reliance on gambling revenues**, which declined as **gambling harm reduction policies succeeded**.

- **Three decades of stable prevention investment** enabled Finland to develop one of the strongest civil society health promotion infrastructures in Europe.
- This approach demonstrated that while hypothecation can support long-term investment, **sustaining prevention** spending ultimately requires **political commitment to maintain funding** when revenue sources change^{21,28}.

Allocated funding according to measuring wide range of prevention indicators ⁵⁶

- The Finnish Institute for Health and Welfare (THL) allocates around 400 million Euros (1.5% of total health budget) for health promotion, prevention and wellbeing activities.
- This fund is allocated to 21 Well-being Services Counties based on a formula using '**HYTE coefficients**', which **measure relative process and outcome indicators across various health and well-being outcomes**. A higher coefficient leads to higher relative funding allocation in the next round.
- The funding allocated to counties based on the coefficient is **not earmarked**, but its purpose is to **encourage counties to take a wide range of measures** that prevent common chronic diseases, promote the functional capacity of older people and reduce accidents, prevent social exclusion, and promote employment and social wellbeing. There is a planned evaluation of this approach ⁵⁷.
- **Process indicators** include: assessment of support needs of those absent from child and school, health clinic check-ups, MMR vaccination coverage among children, brief alcohol interventions, lifestyle counselling for people at risk of type 2 diabetes, health check-ups for the unemployed, etc.
- **Outcome indicators** include measures of population's well-being and health status: patients treated in hospital due to injuries and poisonings; hip fractures among people aged 65 and over, as a percentage of the corresponding age group; young people aged 18–24 not in employment, education or military service (ie NEETs), as a percentage of the age group; long-term recipients of basic social assistance aged 25–64, as a percentage of the age group; people aged 18–34 receiving disability pension due to mental disorders, as a percentage of the corresponding age group, etc.

References

1. World Health Organization. (2025). *Noncommunicable diseases*. <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>
2. World Health Organization. (2024). *Global immunization efforts have saved at least 154 million lives over the past 50 years*. <https://www.who.int/news/item/24-04-2024-global-immunization-efforts-have-saved-at-least-154-million-lives-over-the-past-50-years>
3. Msemburi, W., Karlinsky, A., Knutson, V., Aleshin-Guendel, S., Chatterji, S., & Wakefield, J. (2022, December 14). *The WHO estimates of excess mortality associated with the COVID-19 pandemic*. *Nature*.
4. Bruns, R., & Teran, N. (2022). *Weighing the cost of the pandemic*. Institute for Progress.
5. Mahamat-Saleh, Y., Fiolet, T., Rebeaud, M. E., Mulot, M., Guihur, A., El Fatouhi, et al. (2021). *Diabetes, hypertension, body mass index, smoking and COVID-19-related mortality: A systematic review and meta-analysis of observational studies*. *BMJ Open*, 11(10), e052777.
6. World Health Organization Regional Office for Europe. (2022). *Two million confirmed deaths from COVID-19 in the European Region*. <https://www.who.int/europe/news/item/12-05-2022-two-million-confirmed-deaths-from-covid-19-in-the-european-region>
7. Bevan Foundation. (2021). *Wales needs action to tackle premature deaths from chronic diseases*. <https://www.bevanfoundation.org/views/chronic-disease-health-wales/>
8. Organisation for Economic Co-operation and Development (OECD). (2025). Health expenditure on prevention and primary healthcare. In *Health at a Glance 2025: OECD Indicators*. Available from: https://www.oecd.org/en/publications/health-at-a-glance-2025_8f9e3f98-en/full-report/health-expenditure-on-prevention-and-primary-healthcare_e65bf24a.html
9. International Longevity Centre UK (ILC-UK). (2023). *ILC-UK urges the Health Secretary to invest at least 6% of the health budget on prevention and level the playing field on health*. <https://ilcuk.org.uk/ilc-uk-urges-the-health-secretary-to-invest-more-in-prevention-and-level-the-playing-field-on-health/>
10. Organisation for Economic Co-operation and Development (OECD). (2025). *Health at a Glance 2025: Canada*. Country note. Available from: [Health at a Glance 2025: Canada](#)
11. Bishai D, Paina L, Li Q, Peters DH, Hyder AA. Advancing the application of systems thinking in health: why cure crowds out prevention. *Health Res Policy Syst*. 2014;12:28.
12. WHO EMRO. Health promotion and disease prevention through population-based interventions, including action to address social determinants and health inequity. Date accessed: 25.08.26. <https://www.emro.who.int/about-who/public-health-functions/health-promotion-disease-prevention.html>
13. Public Health Scotland. (2026) *Public health approach to prevention*. Available from: [The three levels of prevention - Public health approach to prevention - What we do and how we work - About us - Public Health Scotland](#)
14. The Kings Fund. (2025) *What is prevention in health?* Available at: [What Is Prevention In Health? | The King's Fund](#)
15. Future Generations Commissioner for Wales. Advice to Welsh Government on taking account of the Well-being of Future Generations Act in the budget process [Internet]. Cardiff: Future Generations Commissioner for Wales; [cited 2026 Aug 27]. Available from: <https://futuregenerations.wales/resources/advice-to-welsh-government-on-taking-account-of-the-well-being-of-future-generations-act-in-the-budget-process/>
16. Jacques O, Noël A. The politics of public health investments. *Soc Sci Med*. 2022;309:115272.
17. O'Brien A, Curtis P, Charlesworth A. Revenue, capital, prevention: a new public spending framework for the future. London: Health Foundation; 2023.
18. Morgan D, James C. Investing in health systems to protect society and boost the economy: priority investments and order-of-magnitude cost estimates. *OECD Health Working Papers* No. 144. Paris: OECD Publishing; 2022.
19. Masters R, Anwar E, Collins B, Cookson R, Capewell S. Return on investment of public health interventions: a systematic review. *J Epidemiol Community Health*. 2017;71(8):827–34.
20. Organisation for Economic Co-operation and Development (OECD), European Observatory on Health Systems and Policies. *Synthesis report 2025: health policy reform trends in the EU*. Paris: OECD Publishing; 2025. Available from: <https://doi.org/10.1787/1f6a8e9a-en>

21. Charlesworth A, Anderson M, Donaldson C, Johnson P, Knapp M, McGuire A, et al. What is the right level of spending needed for health and care in the UK? *Lancet*. 2021;397(10288):2012–22.
22. World Health Organization. (2015). Promoting health, preventing disease: The economic case. WHO.
23. Resnick, B. A., Fisher, J. S., Colrick, I. P., & Leider, J. P. (2017). The foundational public health services as a framework for estimating spending. *American Journal of Preventive Medicine*, 53(5), 646–651.
<https://doi.org/10.1016/j.amepre.2017.04.015>
24. World Health Organization Regional Office for Europe. Unlocking funding for well-being, equity and healthy societies: primer. Copenhagen: WHO Regional Office for Europe; 2026. Available from: [Unlocking funding for well-being, equity and healthy societies: primer](#)
25. Grimm SE, van Mastrigt G, Hilgsmann M. Advancing the economics of prevention: emerging methods and approaches. *Expert Rev Pharmacoecon Outcomes Res*. 2025;25(9):1255–62.
26. Riley WJ, Gearin KJ, Parrotta CD, Briggs J, Gyllstrom ME. Tax levy financing for local public health: fiscal allocation, effort, and capacity. *Am J Prev Med*. 2013;45(6):776–81.
27. Pilar MR, Eyler AA, Moreland-Russell S, Brownson RC. Actual causes of death in relation to media, policy, and funding attention: examining public health priorities. *Front Public Health*. 2020;8:279.
28. McCullough JM, Leider JP, Phillips MA. Integration of health and social services at the systems level: a framework for addressing funding and jurisdictional silos. *Am J Public Health*. 2020;110(S2):S197–203.
29. Barton P, Andronis L, Briggs A, McPherson K, Capewell S. Effectiveness and cost effectiveness of cardiovascular disease prevention in whole populations: modelling study. *BMJ*. 2011;343:d4044.
30. Collins M, Mason H, O'Flaherty M, Guzman-Castillo M, Critchley J, Capewell S. An economic evaluation of salt reduction policies to reduce coronary heart disease in England: a policy modeling study. *Value Health*. 2014;17(5):517–24.
31. Devaux M, Dorfmueller Ciampi M, Guignard R, Lerouge A, Aldea A, Nguyen-Thanh V, et al. Economic evaluation of the recent French tobacco control policy: a model-based approach. *Tob Control*. 2025;34(6):746–52.
32. Forman R, Permanand G, Cylus J, Lessof S, Azzopardi Muscat N, Figueras J. Financing for health system transformation: spending more or spending better (or both)? Copenhagen: WHO Regional Office for Europe, European Observatory on Health Systems and Policies; 2023.
33. Byford, S., Torgerson, D. J., & Raftery, J. (1987). Cost of illness studies. *decision-making*, 8, 317–23.
34. International Longevity Centre UK (ILC-UK). (2023, January 25). *ILC-UK urges the Health Secretary to invest at least 6% of the health budget on prevention and level the playing field on health*. <https://ilcuk.org.uk/ilc-uk-urges-the-health-secretary-to-invest-more-in-prevention-and-level-the-playing-field-on-health/>
35. Ait Ouakrim, D., Wilson, T., Howe, S., Clarke, P., Gartner, C. E., Wilson, N., & Blakely, T. (2023). *Economic effects for citizens and the government of a country-level tobacco endgame strategy: A modelling study*. *Tobacco Control*.
<https://doi.org/10.1136/tc-2023-058131>
36. World Health Organization Regional Office for Europe. Avoidable mortality, risk factors and policies for tackling noncommunicable diseases: leveraging data for impact. Copenhagen: WHO Regional Office for Europe; 2025. Available from: <https://www.who.int/europe>
37. Organisation for Economic Co-operation and Development (OECD). Fiscal sustainability of health systems. Paris: OECD Publishing; 2024. Available from: <https://doi.org/10.1787/880f3195-en>
38. Eurostat. Preventive health care expenditure statistics. Luxembourg: European Commission (2025). Available from: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Preventive_health_care_expenditure_statistics
39. Bertram M, Banatvala N, Kulikov A, Belausteguigoitia I, Sandoval R, Hennis A, et al. Using economic evidence to support policy decisions to fund interventions for non-communicable diseases. *BMJ*. 2019;365:l1648.
40. Willmott, M., Womack, J., Hollingworth, W., & Campbell, R. (2016). Making the case for investment in public health: experiences of Directors of Public Health in English local government. *Journal of Public Health*, 38(2), 237–242. <https://doi.org/10.1093/pubmed/fdv035>
41. Asaria, M., Griffin, S., & Cookson, R. (2016). Distributional cost-effectiveness analysis: a tutorial. *Medical decision making*, 36(1), 8–19.
42. Social Value International. *What is social value? And why it matters*. <https://www.socialvalueint.org/what-is-social-value>

43. World Inequality Lab. (2018). *Part III*. In *World Inequality Report 2018*. <https://wir2018.wid.world/part-3.html>
44. Van Lerven, F., Caddick, D., Mang, S., & Suttor-Sorel, L. (2022). *Europe's fiscal framework: The people's view? How austerity has made us poorer and less able to cope with crises*. New Economics Foundation & Finance Watch. https://www.finance-watch.org/wp-content/uploads/2022/11/NEF_FW_Europes-Fiscal-Framework-.pdf
45. European Commission. (2026). *European Child Guarantee: Preventing and combating poverty and social exclusion among children and families in the EU* (Communication Paper CP-014). https://employment-social-affairs.ec.europa.eu/document/download/7f60af79-936f-42b3-a6c4-a4639c6679ff_en?filename=EC-anti-poverty_ECG_2026.pdf
46. Lane, J., Edwards, R. T., Babarczy, B., Whiteley, H., Oruganti, V., Mölken, M. R. V., Invest4Health Consortium. (2025). A protocol for mobilising novel finance models for collaborative health promotion and disease prevention initiatives: taking a smart capacitating investment approach in the Invest4Health project. *Frontiers in Public Health* (12). <https://doi.org/10.3389/fpubh.2024.1426863>
47. DeSalvo, K., Parekh, A., Hoagland, G. W., Dilley, A., Kaiman, S., Hines, M., & Levi, J. (2019). Developing a financing system to support public health infrastructure. *American Journal of Public Health*, 109(10), 1358–1361. <https://doi.org/10.2105/ajph.2019.30521> European Observatory on Health Systems and Policies. (2023). *Overview of the statutory financing system: Estonia*. Health Systems and Policy Monitor. Date accessed 25.08.26. <https://eurohealthobservatory.who.int/monitors/health-systems-monitor/countries-hspm/hspm/hspm-estonia-2023/financing/overview-of-the-statutory-financing-system>
48. Steverman, S. M., & Shern, D. L. (2017). Financing mechanisms for reducing adversity and enhancing resilience through implementation of primary prevention. *52 Academic Pediatrics*, 17(7S), S144–S149. <https://doi.org/10.1016/j.acap.2017.04.003>
49. Invest4Health. Home. <https://invest4health.eu/>
50. EuroHealthNet. *Guide for financing prevention and health promotion*. <https://financing-guide.eurohealthnet.eu/>
51. World Health Organization. (2024). *Tackling NCDs: Best buys and other recommended interventions for the prevention and control of noncommunicable diseases* (2nd ed.). <https://www.who.int/publications/i/item/9789240091078>
52. World Health Organization Regional Office for Europe. *NCD quick buys: Public health impact in 5 years or less*. <https://www.who.int/europe/teams/special-initiative-on-ncds-and-innovation/ncd-quick-buys>
53. Nam EW, De Leeuw E, Moon JY, Ikeda N, Dorjsuren B, Park MB. Sustainable funding of health initiatives in Wonju, Republic of Korea via a tobacco consumption tax. *Health Promot Int*. 2011;26(4):457–64.
54. Weinhold I, Schindler C, Kossack N, Berndt B, Häckl D. Economic impact of disease prevention in a morbidity-based financing system: does prevention pay off for a statutory health insurance fund in Germany? *Eur J Health Econ*. 2019;20(8):1181–93.
55. Finnish Institute for Health and Welfare (THL). *Wellbeing services counties receive 400 million euros based on the promotion of health and wellbeing*. <https://thl.fi/en/our-view/how-is-27-billion-euros-in-social-and-health-care-funding-allocated-/wellbeing-services-counties-receive-400-million-euros-based-on-the-promotion-of-health-and-wellbeing> [thl.fi]
56. Haveri, A., Jalonen, H., Keskimäki, I., Saari, J., Tynkkynen, L.-K., Pekurinen, M., et al. (2026). *Interim evaluation of the wellbeing services county reform* (Publications of the Finnish Government 2026:18). Finnish Government. <https://julkaisut.valtioneuvosto.fi/bitstreams/a98f97a6-a9f2-413b-ad89-a7b18cac2536/download>