

Treating to Prevent



Annual Report of the Director of Public Health for Bristol, 2025



Acknowledgements

My grateful thanks to the editorial team for undertaking the research and producing this excellent report:

- Viv Harrison Consultant in Public Health
- Nia Reeves, Principal Public Health Specialist
- Edwin Armitage, Public Health Registrar

Thanks also to all of the system partners and colleagues whose commitment to working creatively, in a joint endeavour to improve health and reduce health inequality is a constant source of inspiration.

To our elected members in the Public Health and Community Committee and Health Scrutiny committees, a thank you for your interest, support and challenge throughout the year; and to members of other council committees, thank you for your commitment to creating the conditions for health through everything that the council does.

To all those who make up the amazing network of local action, community hubs and grass roots voluntary sector organisations who do so much day in day out to support individuals and create healthy communities.

And finally, to all of our NHS colleagues, doctors, nurses, health and care professionals, thank you for everything you do, day in day out with care, commitment and compassion, this report is for you.

Thank you.

Version: 2.0: 03.02.2026

Foreword

My report this year focusses on the prevention of ill health.

Nationally, the NHS 10-year plan has called for a shift from sickness to prevention as one of three key “shifts”, recognising that prevention is both better for health outcomes but also essential for the sustainability of the health service.

Prevention is not only the right thing to do for health, but it is the smart thing to do. Healthier people are better able to work, learn and participate in daily life. This reduces pressure on public services, strengthens the economy and contributes to thriving communities.

Bristol has many excellent partnerships and programmes that are making a real difference. From community led initiatives to targeted health campaigns, we can see prevention in action all around. However, too many people still experience poorer health because opportunities to promote health and prevent illness are not equally shared. Uptake of proven preventative interventions varies widely, contributing to the health inequality gap.

This report is written at a point in time when local authorities, the NHS and community and voluntary sector partners are working together to deliver Neighbourhood Health as a core part of the NHS 10-year plan. At the same time Integrated Care Boards are becoming Strategic Commissioning Organisations.

Within this context my report this year focusses on the inequality of access to and uptake of health interventions which contribute to the differential gap in health outcomes

In particular, the report highlights a menu of well evidenced ‘best buys’ in relation to disease prevention which are affordable, and doable, within health and care settings, and within our communities.

Bristol has much to celebrate in the creativity, innovation and commitment within communities and within health and care organisations. The opportunity now, is to work together to make the ambitions for the NHS 10 – year plan a reality. A true shift to prevention which makes prevention the norm, not the exception, ensuring that every person, in every community, in every part of Bristol, has the same chance to live well.

As an appendix to this report, we have published a document of local case studies. This will be maintained as a live resource. If you would be prepared to share your work please send your case studies and best practice stories to:

ph.intelligence@bristol.gov.uk

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1. The prevention challenge

1.1 Preventable diseases

Most of the major illnesses affecting life expectancy, ill health and disability are largely preventable.

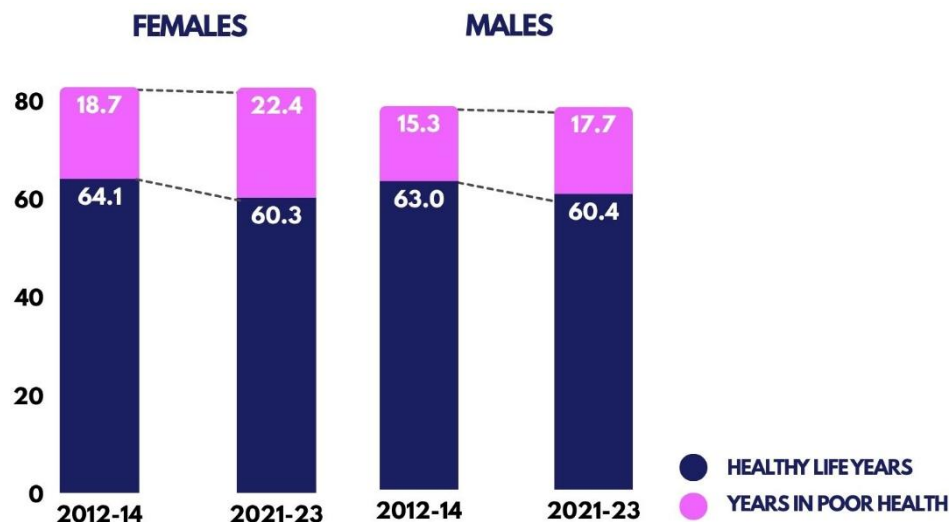
The majority of deaths of those under 75 are due to a small group of often preventable illnesses, these are cardiovascular disease (CVD), cancers, and respiratory conditions.

Overall, the number of years spent in poor health has increased for both men and women in Bristol. For males, nearly 18 years on average are spent in poor health, for females it's around 22 years.

However, delaying the onset of preventable long-term conditions can reduce the amount of time people are spending in poorer health and help them to live healthier for longer.

People are living longer, but the number of years spent in poor health is increasing

Figure 1 Healthy Life Expectancy and years in poor health for Males and Females in Bristol (2012-14 and 2021-23)¹



Prevention not only improves health and lives for individuals but can also reduce pressure on our health and care services.

There are examples of preventative treatments with strong evidence that these prevention measures can reduce emergency admissions to hospital. Good management of high blood pressure reduces hospital admissions for heart attacks and strokes, within benefits in three years but with improvements from year 1²

Prevention interventions work - they effectively prevent, delay or reduce ill health for individuals.

Early deaths from major diseases are starting to increase after years of steady decline

Nationally, some of the favourable trends in population health we have seen over recent decades, such as improvements in life expectancy, and falling numbers of early deaths from heart disease, have now reversed.

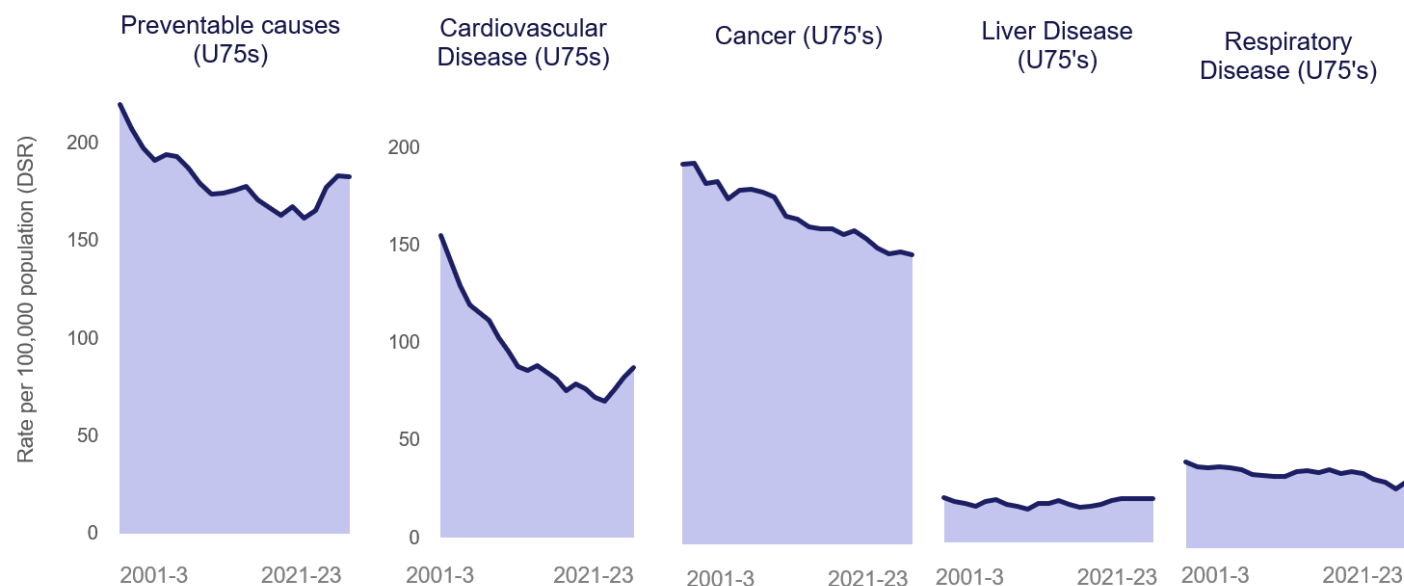
This is reflected in our local data, and we are seeing early deaths rates rising in Bristol, as illustrated in Figure 2. Early deaths from cancer are the highest, followed by CVD.

Over time, there have been increases in early deaths (U75s) from preventable causes, CVD and respiratory disease, which have all increased from 2020 onwards. Early deaths from cancer continue to decrease (Figure 2).

Finding signs of illness early, and treatments to prevent further disease (known as secondary prevention) have made a huge contribution to these improvements, but progress has now stalled, and particularly so among more deprived communities.

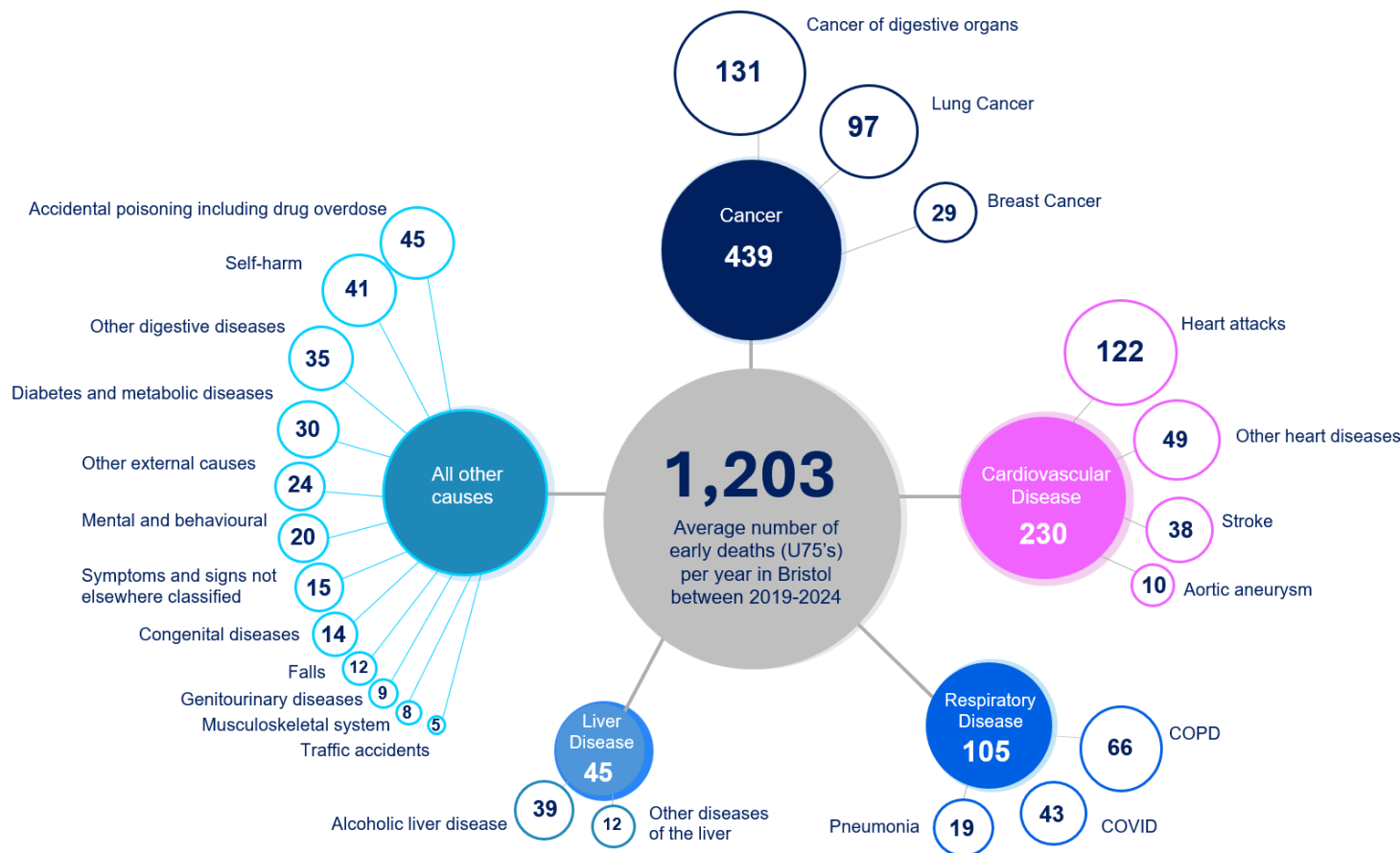
Figure 2 Trends in early deaths in Bristol from the major conditions (2001-3 to 2021-23)³

“Deaths from preventable causes are considered preventable if they could have potentially been avoided by public health or primary interventions”



Four groups of conditions contribute to most early deaths in Bristol.

Figure 3 Major causes of early death (before 75 years) in Bristol (average number of deaths per year over the period 2019-2024)⁴



Early deaths have a significant impact on individuals, families and communities.

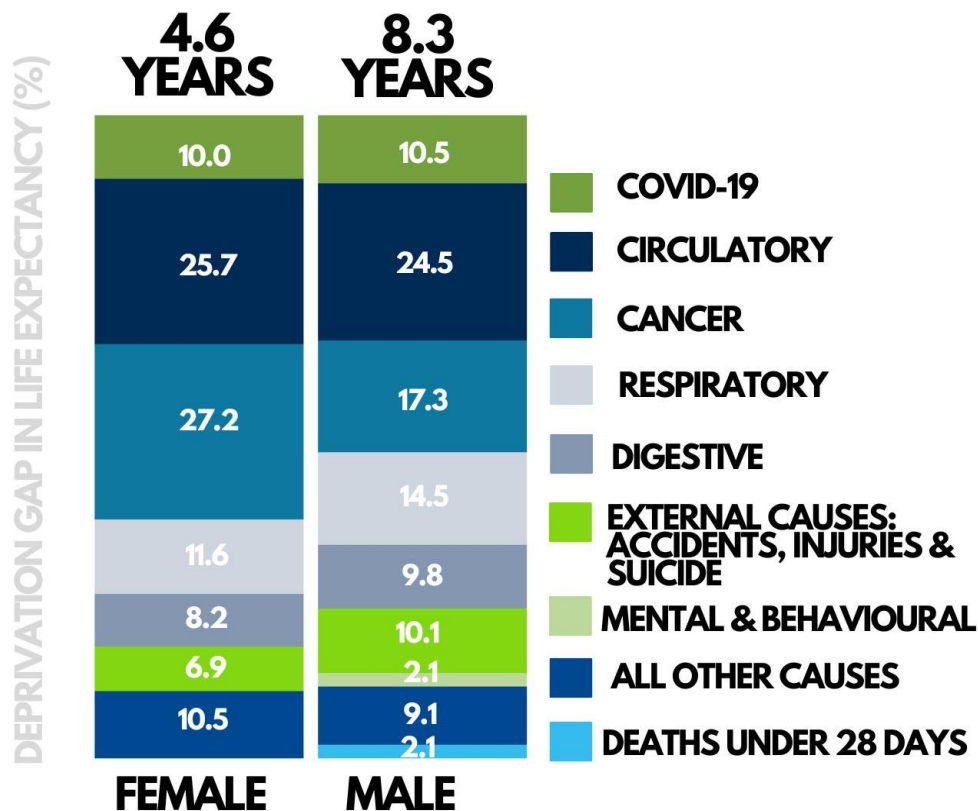
Bristol has around 1,203 early deaths (U75) each year from the 4 main causes including Cancer, CVD, respiratory and liver disease.

Cancers account for over a third of all early deaths, and these 4 groups of conditions together account for more than two-thirds of the early deaths in Bristol.

These conditions - cancers, cardiovascular diseases, respiratory conditions and liver disease - are largely preventable, through public health approaches and healthcare interventions.

1.2 The life expectancy gap in Bristol

Figure 4 Breakdown of the life expectancy gap between the most and least deprived quintiles in City of Bristol by cause of death, 2020 to 2021⁵



Not only are cancers, CVD, respiratory and liver diseases the most common causes of early deaths in Bristol, these same largely preventable conditions also drive most of the gap in life expectancy between the most and least deprived areas of Bristol.

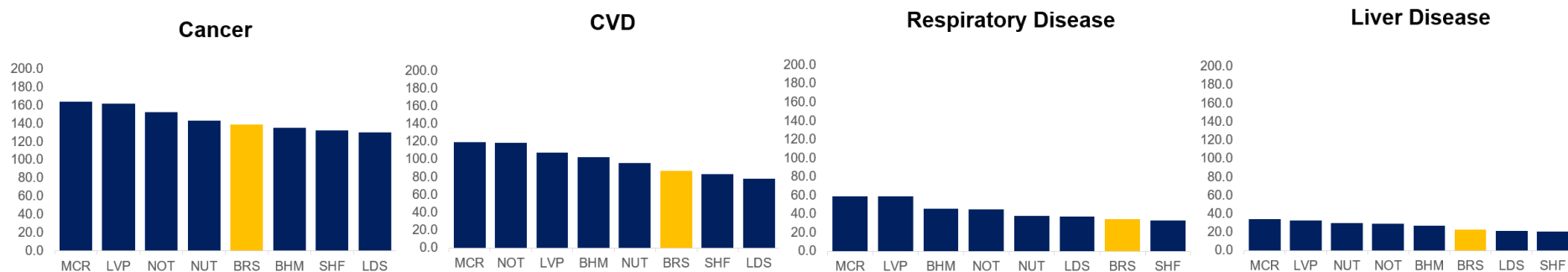
The gap in life expectancy between the most and least deprived areas for females is 4.6 years and 8.3 years for males. For both, this gap in life expectancy is largely caused by circulatory diseases, cancer and respiratory disease (Figure 4).

Nearly half of all cancers, and three quarters of cases of COPD (chronic obstructive pulmonary disease) are preventable^{6,7}

These conditions share common risk factors which can be prevented or reduced; these are smoking, harmful alcohol consumption, unhealthy weight and diet, and being physically inactive.

By improving health behaviours many cases of long term ill health and early deaths from these conditions can be prevented or at least delayed.

Figure 5 Early deaths (U75) ranked by Core Cities for Cancer, CVD, Respiratory Disease and Liver Disease (2021-23)⁴



Core cities are: Manchester, Liverpool, Nottingham, Newcastle-Upon-Tyne, Birmingham, Sheffield, Leeds and Bristol

Cardiovascular disease: High blood pressure, atrial fibrillation, and high cholesterol are key medical risk factors for heart disease. In Bristol, early death rates from CVD are higher than the England average and have been increasing in recent years. Compared to Core Cities, Bristol ranks 2nd lowest overall for early deaths from CVD (2021-23).

Cancer: Not all cancers can be prevented, but stopping smoking, healthy weight, staying safe in the sun, cutting down on alcohol and eating a healthy diet can reduce the risk of cancer. Early death rates from cancer (under 75 years) in Bristol are higher than the England average. Compared to Core Cities, Bristol ranks 5th out of 8 overall for early deaths from Cancer (2021-23). Rates are higher for males and have been increasing over recent years.

Respiratory disease: Smoking, air pollution, fuel poverty, and poor housing are all risk factors for developing or for worsening respiratory disease. Barriers to accessing and engaging with healthcare can also affect outcomes. Rates of early death from respiratory disease are increasing in Bristol especially among males. Compared to Core Cities, Bristol ranks 2nd lowest overall from early deaths from respiratory disease (2021-23).

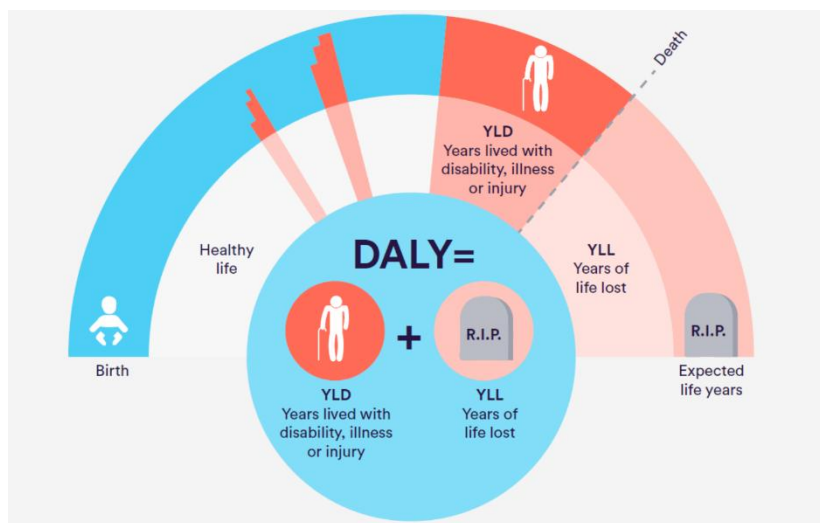
Liver disease: has lower deaths rates overall than the other major causes but is on the rise in Bristol and nationally. In England the number of people dying prematurely from liver disease and liver cancer has increased by almost two-thirds (64%) in the last 20 years. Bristol has the third highest rates in the South West region. Compared to Core Cities, Bristol ranks 6th out of 8 for early deaths from liver disease (2021-23).

1.3 Ill health and disability in Bristol

Looking beyond causes of early deaths, there are a number of health conditions which have the biggest impact on people’s lives and wellbeing in Bristol. Disability adjusted life years (DALYs) are a measure of disease burden or health need in a population. A DALY is a combination of the number of years lost due to an early death, which is years of life lost (YLL), and the number of years lived with a disability (YLD).

Figure 6 shows the life course from birth to death. Throughout life people have periods of illness or disability and many people are often living their later years in poor health and some die earlier than they should, due to disease or illness.

Figure 6 Disability Adjusted Life Years (Nuffield Trust, 2019⁸)



In Bristol, the top five leading causes of DALYs in 2021⁹ were cancers, cardiovascular diseases, musculoskeletal disorders, mental disorders and respiratory infections. CVD, cancers and respiratory diseases are major causes of both early deaths and disease burden in life.

Musculoskeletal (MSK) conditions and mental ill health, whilst not featuring among the biggest causes of early deaths, are also major contributors to ill health and disability in Bristol.

MSK conditions are common causes of long term pain and disability, and prevention and early intervention can substantially reduce this burden.

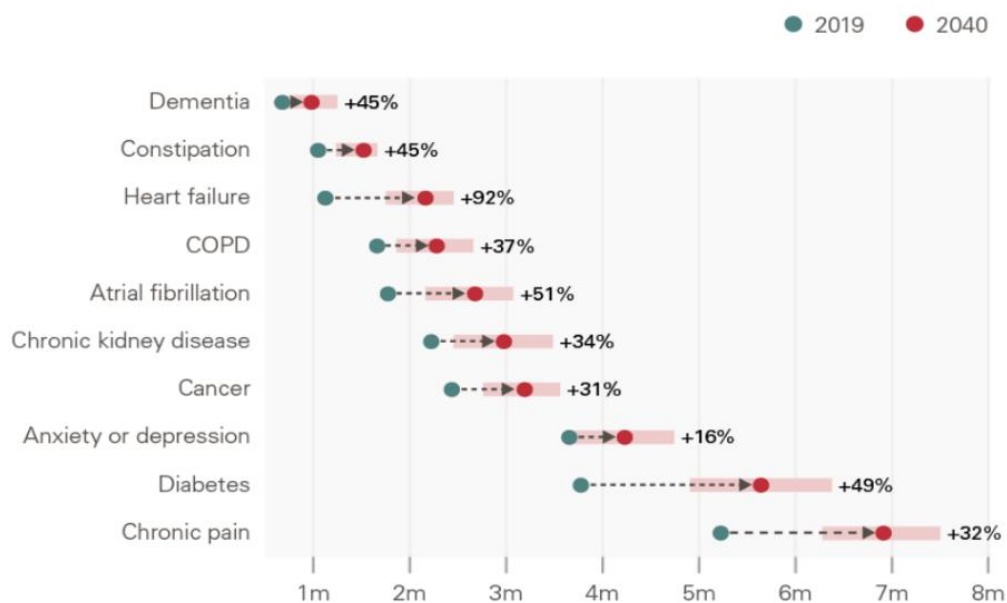
Factors that increase the likelihood of MSK problems include being physically inactive, overweight or obese, smoking, and lack of calcium in the diet or low vitamin D levels.

Seven in 10 people who report living with a long-term MSK condition are overweight or obese¹⁰

MSK conditions and chronic pain can also have a significant impact on mental health, especially anxiety and depression

By 2040, there is expected to be an increase in many long-term conditions, in some cases these are expected to almost double

Figure 7 Projected total number of diagnosed cases for the top 10 conditions with the highest impact on health care use and mortality among those aged 30 years and older, including demographic changes, England, 2019 and projected for 2040¹¹



The Health Foundation’s modelling of future health trends in England predicts that numbers of people living with the top 10-conditions with the highest impact on healthcare use and deaths in people aged 30 and older are going to increase substantially over the next fifteen years.

The number of people living with a long term condition is projected to increase by 37%, from 1 in 6 people in 2019, to 1 in 5 by 2040.

Many of these conditions can be prevented or delayed.

Diabetes is one of the commonest long term conditions and is predicted to increase the most – by almost 50% between 2019 and 2040.

Most cases of type 2 diabetes can be prevented or delayed, especially though maintaining a healthy weight and good nutrition and keeping active.

Current and recent national policy recognises this need for a stronger focus on prevention. The NHS Long Term Plan 2019 supported preventative programmes such as tackling tobacco dependence in hospital settings¹²

The new 10 Year Plan for the NHS published earlier in 2025¹³ reinforces prevention as a key priority, essential for a sustainable health service in the face of a changing population and growing healthcare demand. It highlights moving from sickness to prevention as one of the ‘3 shifts’ needed, alongside analogue to digital, and hospital to community^{13,14}

This includes measures to tackle the health behaviours and risks behind much preventable illness – smoking, obesity, and harmful alcohol consumption.

1.4 Reducing the health gap in Bristol

Inequality has a significant impact on health outcomes. People living in our most deprived areas are more likely to smoke and less likely to have a healthy weight. There are higher rates of anxiety, depression and chronic pain in these communities, which are often made worse by issues such as poor housing, lack of job opportunities and financial pressures.

Figure 8 Major causes of early deaths (U75) in Bristol by the most and least deprived areas¹⁵

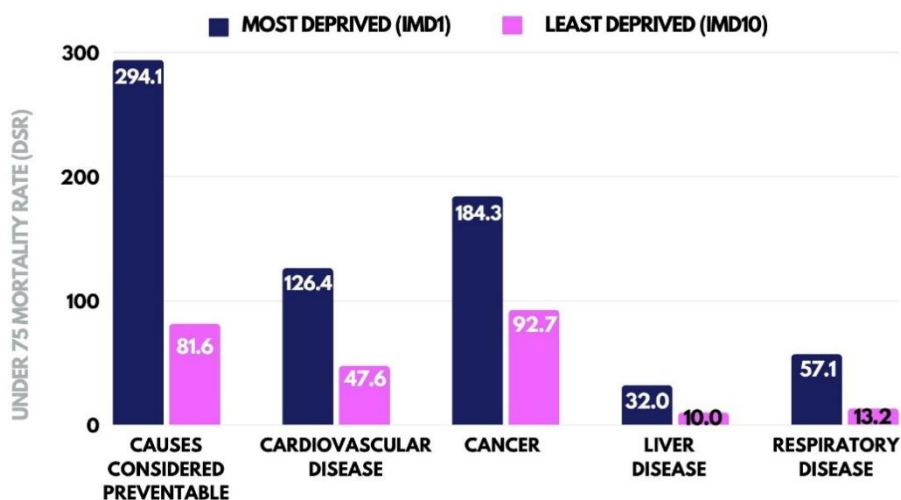


Figure 8 shows the inequality gap for early deaths (U75s) in Bristol between those in the most and least deprived populations.

People in deprived areas are less likely to access preventative healthcare, and many experience challenges with health and digital literacy. All of which are barriers to getting timely support, which can improve health outcomes.

Inequalities are not limited to differences by deprivation. Issues such as discrimination because of race, gender, disability or sexuality can make life even harder for some groups.

Early deaths from cardiovascular disease are around 2.7 times higher in the most deprived areas compared to the least deprived areas.

Early deaths from cancer are around 2.0 times higher in the most deprived areas compared to the least deprived areas.

For respiratory disease early deaths are around 4.3 times higher in the most deprived areas compared to the least deprived areas.

Early deaths from Liver Disease are around 3.2 times higher in the most deprived areas compared to the least deprived areas.

1.5 The prevention opportunity

An effective approach to prevention needs to be embedded throughout all stages of life, and all stages of a health condition, through a combination of primary, secondary and tertiary prevention measures.

Secondary prevention focuses on identifying health conditions as early as possible and intervening to help prevent or delay the progression of illness.

This is different from **primary prevention** which creates the conditions that help people stay well such as promoting healthy lifestyles and environments.

Tertiary prevention supports people living with a condition or illness and aims to improve quality of life and reduce further complications.

Together, these approaches help people either stay well, get back to wellness, or manage illness more effectively

Previous Director of Public Health reports which have focused on Primary prevention can be found here [Director of Public Health annual report 2024](#)

This report focuses on the preventative care and treatment often included in definitions of secondary prevention. The report will outline opportunities to identify the causes or risk factors for ill health as early as possible and to take action to delay or reduce the chances of them leading to more serious illnesses.

Examples of secondary prevention interventions include reducing heart and circulatory diseases through medications for high blood pressure and statins to lower blood cholesterol levels.

Other examples of secondary prevention include supporting people to stop smoking, and programmes to help people who are overweight work towards a healthier body weight, which help to reduce or prevent the chance of developing serious diseases including many cancers.

Evidence that secondary prevention programmes can substantially reduce ill health is some of the strongest in healthcare practice offering approaches that result in improvement in health outcomes and also deliver good value for money¹⁴

2. What works for Prevention?

2.1 What does good prevention look like?

Across the country, health and care preventative programmes (secondary prevention) have demonstrated success, from targeted vaccinations and targeted cancer screening to structured interventions addressing cardiovascular disease, diabetes, and modifiable risk factors like smoking, obesity, hypertension and alcohol as referenced above^{16,17}

There is good evidence for many preventative interventions and treatments showing they work. NHS England has set out several core interventions that show clear evidence of improved health, reduced admissions to hospital, and strong returns on the investment.¹⁸

This section looks at the evidence for preventative interventions to understand how our health and care system can get the best value from prevention.

Interventions for early identification and early intervention for major conditions affecting health in Bristol have been assessed across 3 dimensions:

1. **Evidence of impact:** what measurable health outcomes does the intervention deliver?
2. **Value for money:** is the intervention cost effective; or does it deliver a strong return on the investment (ROI)?
3. **Equity impact:** what do we know about the intervention helping reduce health inequalities

NHS England, in partnership with NICE, have resources setting out advice on the most impactful interventions for prevention in the areas of CVD, diabetes, respiratory disease and modifiable risk factors, which can deliver most benefit for individuals.

This evidence is summarised below together with evidence for other preventative interventions.

2.2 Best buys - addressing key risk factors

Many of the leading causes of ill health and early death are linked to behaviours that can be changed.

Smoking, obesity, and alcohol misuse are major contributors to cardiovascular disease, cancer, respiratory conditions, and liver disease. Interventions that target these risk factors are among the most effective and cost-efficient ways to improve health outcomes and reduce pressure on the NHS.

Key interventions include hospital-based smoking cessation programmes, such as the CURE model, which offer support to people admitted to hospital who smoke.

Alcohol care teams provide brief interventions, medical management, and referrals for people with alcohol-related problems.

Structured weight management programmes, including digital options, help people lose weight and reduce their risk of diabetes and heart disease.

These approaches are particularly valuable when embedded into routine care and designed to reach people who may not otherwise seek help.¹⁹

Risk Factors in Bristol

SMOKING



**12.7% of adults
in Bristol are
smokers....**

**...that's around
49,700 people**

HIGH BLOOD PRESSURE



**10.9% diagnosed
with high blood
pressure...**

**...that's around
63,096 people**

HEALTHY WEIGHT



**55% of adults
are overweight
or obese....**

**...that's around
218,900 people**

ALCOHOL CONSUMPTION

**Around a third of
adults drink more
than 14 units of
alcohol per week**

**...that's around
119,300 people**

“Best Buys”: Modifiable risk factors: Smoking

Smoking:

Smoking remains one of the leading preventable causes of illness, disability, and premature death, placing a significant burden on individuals, communities, and health services.

It is strongly associated with cardiovascular disease, respiratory conditions, and many cancers, and contributes to widening health inequalities.

In 2023, 12.7% of the Bristol population were smokers. Smoking rates are higher in people who rent from local authorities/housing associations (24.9%), highest for people who have never worked or in long term unemployment (22.8%) and in routine and manual occupations (17.1%)²⁹.

Local data from Bristol’s Quality of Life survey shows that smoking rates are significantly higher in the most deprived areas (21.9%) compared to the least deprived areas (7.8%).

People who are disabled, lesbian, gay, bisexual, carers, single parents and of white minority ethnicity and black/black British ethnicity also have higher rates of smoking when compared to the Bristol average.

Hospital-Based Smoking Cessation (CURE Model)

What it is: The CURE model offers comprehensive smoking cessation support to all patients admitted to hospital, regardless of the reason for admission. It combines behavioural advice, pharmacotherapy (such as nicotine replacement therapy), and structured follow-up after discharge²⁰.

Evidence of Impact: The CURE model shows quit rates of 22% at 12 weeks among smokers admitted to hospital, and cuts readmissions from 13.3% to 7.1%, improving recovery and reducing future hospital use.^{20, 21} Engagement is high, with over 60% of smokers accepting support and two-thirds receiving pharmacotherapy.²²

Size of the Prize: With 12.7% of adults smoking in Bristol, this equates to roughly 50,000 smokers.²³ Around 1 in 5 admissions involve a smoker, and assuming ~200,000 admissions in Bristol per year, CURE could help prevent 2,480 re-admissions, and result in 8,800 successful 12-week quits a year.

Cost and Value for Money: Smoking costs England £17bn per year, including £14bn in lost productivity, and £3bn to the NHS and social care.²⁴ The return on investment of CURE is £30.49 for every £1 spent. The cost per QALY gained is just £487, making it one of the most cost-effective interventions available.²⁵ Modelling suggests a national 27% uptake could save £82.9m in the first year to the NHS, excluding wider economic benefits.²⁶

Equity Impact: Smoking rates are higher in deprived communities and among people with mental health conditions. In-hospital pathways reach groups often missed by community services.

Evidence shows higher uptake among minority ethnic patients when support is offered on the ward, and outcomes improve with immediate pharmacotherapy, specialist advisers for mental health, and tailored follow-up via community pharmacy or digital options.^{27, 28}

HOSPITAL BASED SMOKING CESSATION (CURE MODEL)

is an offer of support to stop smoking, regardless of the reason for admission

12% of adults in Bristol are smokers

1 in 5 hospital admissions involve a smoker

THE RETURN ON INVESTMENT FOR CURE IS...
£30.49
...FOR EVERY £1 INVESTED

CURE could help prevent 2,482 re-admissions and lead to 8,800 successful 12 week quits per year

“Best Buys”: Modifiable risk factors: Alcohol

Alcohol Consumption:

Alcohol consumption is a major contributor to preventable illness, injury, and premature death, as well as wider social and economic harms.

Excessive drinking is linked to liver disease, cardiovascular conditions, certain cancers, and poor mental health, and it increases the risk of accidents, violence, and family breakdown.

The impact extends beyond individuals, affecting families, workplaces, and communities, and places a significant burden on health and social care services.

It is estimated that 29.7% of adults in Bristol drink more than 14 units of alcohol per week (2015-2018), exceeding government guidelines that are recommended for low-risk drinking.

Alcohol-related hospital admissions are higher in Bristol than the national average and increasing³⁶.

Admissions for people living in the most deprived areas of Bristol are more than twice as high than for people living in the least deprived areas³⁶.

Alcohol Care Teams (ACT)

What it is: Hospital-based multidisciplinary teams identify and support inpatients with alcohol dependence through brief interventions, medical management, and referral to community services.

Evidence of Impact: ACTs improve outcomes for patients with alcohol dependence by reducing avoidable admissions and length of stay. In Bolton, the ACT saved around 2,000 bed days in 1 year and cut readmissions by 3%³⁰. In Salford, hospital admissions fell 66% in those under ACT care.³¹

Size of the Prize: In 2023/24, Bristol recorded 2,816 hospital stays due to alcohol-related harm.³² If alcohol-related admissions could be reduced by just 10%, that would prevent around 280 admissions a year in Bristol, saving ~840-1,120 bed days (assuming an average 3-4 day stay).

Cost and Value for Money: Alcohol abuse costs the NHS an estimated £3.5 billion and £27.44 billion to wider society per year.^{33,34} Modelling suggests that ACTs could save 254,000 bed days and 78,000 admissions per year in England.⁹⁰ The Bolton ACT achieved a £3.85 return for every £1 invested, which if scaled up could save the NHS and wider economy billions of pounds per year.⁹⁰

Equity Impact: Alcohol-related harm is unevenly distributed. People in the most deprived areas of Bristol have twice the rate of alcohol-specific hospital admissions compared to the least deprived. One in three alcohol-specific deaths occur in the most deprived areas.

People with co-occurring mental illness face additional barriers to care.⁹² ACTs help reduce inequalities by targeting frequent attenders, providing outreach, and linking people to community services essential for equitable care.³⁵

ALCOHOL CARE TEAMS

is an offer of support for people admitted to hospital with alcohol dependence

2,816 admissions for alcohol-related harm in 2023-24 in Bristol

reducing these admissions by just 10% could prevent

280 ALCOHOL RELATED ADMISSIONS PER YEAR IN BRISTOL

Alcohol related harm is unequal. People living in the most deprived areas have twice the rate of alcohol related admissions compared to the least deprived

Modifiable risk factors: Overweight and Obesity

Overweight and obesity are major risk factors for a wide range of chronic conditions, including type 2 diabetes, cardiovascular disease, musculoskeletal problems, and some cancers.

This can also have significant impacts on mental health and quality of life and also contribute to increased demand on health and social care services.

Over half of the adult population in Bristol are overweight or obese (55.9%)³⁷.

Local Quality of Life survey data for 2024/25 shows that there is much variation across wards in the city. 62.6% of people are overweight or obese in Hartcliffe and Withywood and 23.5% in Clifton³⁷.

Rates of obesity and overweight were higher for people who are disabled, aged 65+, male, Asian or Black ethnicity and living in the most deprived areas.

Section 2.5 Best buys - Diabetes Prevention and 2.8 Best Buys: Mental and physical health opportunities describe examples of best buys for prevention in relation to maintaining a healthy weight.

Modifiable risk factors: High Blood Pressure:

High blood pressure is one of the most significant risk factors for cardiovascular disease (CVD), stroke, kidney disease, and premature death.

It often develops without noticeable symptoms, meaning many people remain undiagnosed and untreated, increasing the risk of serious complications

There are 63,096 people (all ages) with a record of high blood pressure in Bristol on their GP record - that's 10.9% of the population.

It is estimated that 7.7% of the adult population (16+) have undiagnosed high blood pressure, in Bristol that's around 30,895 people.

People living in the most deprived areas are more likely to have CVD, and have higher rates of diabetes, obesity, smoking and alcohol consumption, which are all key risk factors for CVD³⁸.

Section 2.4 Best buys - Cardiovascular Disease prevention describes in detail our best buys for CVD prevention.

2.3 Best buys - Vaccination

Vaccination is one of the most effective and cost-efficient ways to prevent illness, hospitalisation, and death.

National programmes for flu, pneumococcal, HPV, and COVID-19 vaccines have consistently demonstrated strong public health impact. These interventions protect individuals and communities, reduce pressure on health services, and help address health inequalities when delivered equitably.

Flu vaccination rates are lower for pregnant women, frontline healthcare and social care workers, chronic liver disease, chronic respiratory disease and people who are morbidly obese. Uptake is lower for ethnic minority groups and lowest for Black/Black British ethnic groups⁴⁴.

The main vaccination programmes include seasonal flu vaccination for older adults, people with clinical risk conditions, pregnant women, and frontline health and care staff.

Pneumococcal vaccines are offered to infants, older adults, and those with underlying health conditions. HPV vaccination is provided to adolescents to prevent cervical and other cancers. COVID-19 booster campaigns target older and immunocompromised groups.

These programmes are delivered through GP practices, community clinics, care homes, and occupational health services.

'Best Buys' in Vaccination: Seasonal Influenza Vaccination

What it is: The flu vaccine is offered annually to people at higher risk of complications, including older adults, people with long-term conditions, pregnant women, and frontline health and care workers.

Evidence of Impact: Flu vaccination prevented between 96,000 and 120,000 hospital admissions in England last winter. It also reduced the risk of serious illness and death, particularly in vulnerable groups.³⁸ NICE recommends a multicomponent approach to improve uptake, combining opportunistic offers during all healthcare contacts, personalised invitations and reminders community-based delivery (e.g. pharmacies, outreach clinics) and staff training and performance feedback.³⁹

Size of the Prize: In Bristol, flu vaccination uptake is 76.2% in over-65s and 43.2% in under-65s at risk.⁴⁰ If uptake increased by 10%, around 10,500 more people would be vaccinated each year. This could avoid an estimated 53 hospital admissions each year in Bristol.

Cost and Value for Money: The NHS invests £180 million annually in the flu vaccination programme. This is offset by savings from reduced pressure on services.⁴⁴ Wider economic benefits are substantial with workplace absences from flu costing an estimated £644 million each year, and respiratory illnesses, including flu, cost the NHS £3.9 billion and the wider economy £3.6 billion annually.^{41,42}

Equity Impact: Coverage remains uneven in Bristol, with almost half of adults with chronic conditions unvaccinated, and 2 in 10 over 65s at risk going unvaccinated. Uptake last winter was 64.9% for heart disease, 56.2% for respiratory disease, and 48.8% for liver disease. Uptake is lower in deprived areas and among Black and Asian groups, with 34.0% uptake in Black at risk adults, compared to 58.2% in White at risk adults⁴³

2.4 Best buys - Cardiovascular Disease prevention

Cardiovascular disease is often preventable and treatable. It's closely linked to risk factors we can change like smoking, diet and blood pressure and there's strong evidence that early detection and treatment works. Interventions in this area offer good return on investment and can help reduce inequalities, especially when delivered in accessible community settings.

NHS Health Checks deliver substantial cardiovascular prevention. However, uptake in local authorities in the most deprived decile is only 32.4% compared to 44.3% in the least deprived decile⁴⁸.

In BNSSG, our data show people in the broad ethnic group 'Black' are less likely to be treated to the appropriate treatment threshold

'Best Buys': CVD Prevention

NHS Health Checks

What it is: A 5 yearly check-up offered to adults aged 40-74 to check their risk of heart disease, stroke, diabetes, and kidney disease. It includes blood pressure, cholesterol, and lifestyle assessments, and can lead to early intervention or treatment.

Evidence of Impact: One in four people who attend are identified as at higher risk.⁴⁶ Studies show that attendees have lower rates of heart attacks (15% lower), atrial fibrillation (9% lower), liver cirrhosis (44% lower) and death from cardiovascular disease (23% lower) compared to those who don't attend.⁴⁷

Size of the Prize: Bristol has around 114,000 residents aged 40-74 eligible for NHS Health Checks. Currently, around 21,000 are invited each year (18% of the eligible population). Of those invited, around half attend.⁴⁸ If Bristol increased invitations and uptake to carry out 10,000

for high blood pressure. This gap between ethnic groups is greater than the gap for deprivation.

A wide range of secondary prevention interventions and treatments are available to reduce cardiovascular risk and improve outcomes: e.g. NHS Health Checks to identify and manage or treat key risk factors for CVD among adults aged 40-74 and blood pressure checks delivered in community pharmacies.

Regular review and optimising treatment for people with diagnosed conditions or risks, such as hypertension, atrial fibrillation, and high cholesterol to prevent progression of CVD has a significant and rapid impact on health of the population.⁴⁵

Optimising Treatment for CVD Risk Factors

What it is: This involves reviewing and optimising treatment in patients with high blood pressure, atrial fibrillation, high cholesterol, or cardiovascular disease to ensure they are receiving the right medication to reduce their risk of heart attack and stroke.

Evidence of Impact: Lowering systolic blood pressure by 5 mmHg across the population reduces the risk of stroke by 13%, and coronary heart disease by 8%.⁵² Every 1 mmol/L reduction in LDL cholesterol lowers the risk of heart attacks or strokes by 25%.⁵³

Size of the Prize: Improving the management of patients already diagnosed with high blood pressure aligns with the NHS Long Term Plan ambition. It is estimated that this could prevent 347 heart attacks or strokes and 112 deaths over the next three years in Bristol, North Somerset and South Gloucestershire.

more health checks per year, over 10 years, we estimate this could prevent around 90 heart attacks and 69 cardiovascular deaths.

Cost and Value for Money: The programme costs around £13-£15 per check. For every £1 spent, it returns up to £3.55 in savings. Further investment to improve follow-up by increasing the impact and engagement among attendees of alcohol reduction, increased physical activity and weight loss interventions, is estimated to achieve an additional ROI of £5.18 for every £1 spent.⁴⁹

HEALTH CHECKS

Every five years for people aged 40-74 years old



includes blood pressure, cholesterol and lifestyle assessments



One in four identified as higher risk



it costs £13-15 per health check

Every £1 invested saves £3.55



if follow-up care is improved this increases to £5.16

Equity Impact: People from more deprived areas and ethnic minority groups (especially South Asian, Black African, and Black Caribbean populations) have a higher prevalence of undiagnosed CVD risk factors.⁵⁰ Uptake for health checks is lower in these groups.

A UK pilot using community health workers for proactive outreach in a deprived area achieved an 82% higher uptake of health checks.⁵¹

Cost and Value for Money: Reducing the population average blood pressure by 5 mmHg is one of the most cost-effective ways to reduce cardiovascular disease. Improving management of patients with known high blood pressure could save an estimated £3.9 million (BNSSG Size of the Prize UCL, August 2025).

OPTIMISING TREATMENT FOR CVD RISK FACTORS

Improving management of people already diagnosed with high blood pressure to recommended treatment levels could prevent



347 Heart Attacks & Strokes



112 Deaths



Save £3.9 million

Over the next three years



Equity Impact: Premature CVD mortality in Bristol's most deprived quintile is 2.7 times higher than that of the least deprived.⁵⁴

Improving blood pressure management in the most deprived and among South Asian, Black African and Black Caribbean groups offers a big opportunity to improve population health in Bristol and also reduce inequalities.

2.5 Best buys - Diabetes Prevention

Type 2 Diabetes is becoming more common and requires good long-term management to reduce the risk of complications such as kidney disease, CVD and eye problems.

Structured monitoring and education programmes are effective in reducing emergency admissions and improving self-management. These are low-cost interventions also address inequalities in care and outcomes.

Key interventions in diabetes prevention and management include the NHS Diabetes Prevention Programme (NDPP), which

supports people at higher risk of type 2 diabetes through a nine-month lifestyle and behaviour change programme.

Structured education programmes such as DAFNE^{55,56} (for type 1 diabetes) and X-PERT (for type 2) help people manage their condition and reduce complications.

NICE recommends 9 diabetes care processes that should be completed annually, including checks on blood pressure, cholesterol, HbA1c (blood sugar measurement), foot health, and kidney function, which help prevent complications and reduce hospital admissions.⁵⁷

‘Best Buys’: Diabetes

NHS Diabetes Prevention Programme (NDPP)

What it is: This programme is for people identified at higher risk of developing type 2 diabetes from a blood sugar measurement. It is a nine month course helping people change lifestyle and health related behaviours to reduce their risk of developing type 2 diabetes.

Evidence of Impact: People who complete the programme have a 37% lower chance of developing diabetes. At a population level the NDPP has reduced new cases of type 2 diabetes by 7%.⁵⁸

Size of the Prize: In Bristol, around 45,000 adults are estimated to be at high risk of developing type 2 diabetes.⁵⁹ If half of this group were referred to the NHS Diabetes Prevention Programme and half of those completed it (around 11,250 people) then, we estimate that

Delivery of Nine Diabetes Care Processes

What it is: Annual check of 9 key health indicators for people with diabetes which include blood pressure, cholesterol, HbA1c (blood sugar measurement), kidney function, foot health check, and smoking status.

Evidence of Impact: Completing all nine care processes is associated with a 22-26% reduction in emergency hospital admissions. Achieving blood sugar and cholesterol within recommended levels reduces the risk of amputations, with lower rates in those who had completed a greater number of care processes. It reduces the risk of lower limb amputations, diabetic eye disease, and cardiovascular problems.⁶³

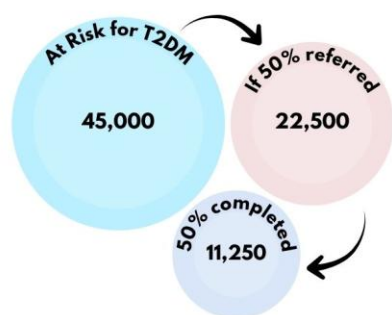
Cost and Value for Money: Costs of delivering the nine diabetes care processes is low and estimated to cost £1,682 per person over their lifetime⁶⁴. In BNSSG, it is estimated that diabetes costs are around

around 1,250 cases of type 2 diabetes could be prevented or delayed over the next decade.

Cost and Value for Money: The programme costs between £200 and £250 per person. Long-term modelling shows the NHS DPP would save £135,755 and 40.8 QALYs per 1,000 participants. This translates to savings of £71.4 million over 35 years.⁶⁰

NHS DIABETES PREVENTION PROGRAMME

Tailored support programme for people identified as at risk from developing Type 2 Diabetes



1,250 cases of type 2 diabetes in Bristol could be prevented or delayed over the next decade

Equity Impact: People from deprived areas and minority ethnic groups, such as South Asian, Black African, and Black Caribbean communities, are at higher risk of type 2 diabetes but have lower NHS DPP completion rates (25% less likely than White participants).⁶¹ Evidence shows that culturally tailored outreach and community engagement could improve uptake and retention, addressing barriers related to language, trust, and cultural norms.⁶²

£168.2 million for diagnosis, management and complications⁶⁵. Approximately 60% of this spend is for treating complications such as amputations, kidney failure, and heart disease. Cutting complication costs through improving the achievement of the 9 care processes by just 10-20% could save £9.8-19.6 million per year.⁶⁶

DELIVERY OF 9 DIABETES CARE PROCESSES

Cost of delivering programme over lifetime

£1,682

Annual cost diagnosis, management and complications in BNSSG

£168M

Two thirds of cost due to complications

60%

....such as amputations, kidney failure and heart disease

Reducing complications by 10-20% could save £9.8-19.6M

Equity Impact: People from deprived areas and minority ethnic groups are less likely to receive all nine care processes, leading to higher complication rates. Diabetes UK's "No One Left Behind" strategy aims to close gaps by ensuring culturally relevant support, tackling systemic barriers, and working with the NHS to deliver fair access. The strategy sets a goal of 90% uptake of all 9 care processes by 2030, reducing preventable complications and improving outcomes across all groups.⁶⁷

2.6 Best buys - Respiratory Disease prevention

Respiratory conditions such as asthma and chronic obstructive pulmonary disease (COPD) are major contributors to poor health and health inequalities and many cases are preventable or manageable with early intervention.

Targeted diagnosis, education, and rehabilitation can reduce hospital use and improve quality of life, which is especially needed in deprived areas where burden is highest.⁶⁸

Medicines optimisation, including reviewing inhaler technique and simplifying treatment plans, helps people to manage their condition and reduces the risk of emergency hospital admissions.

“Best Buys” Respiratory:

Medicines Optimisation for Asthma and COPD

What it is: Reviewing how people use their inhalers, simplifying medication plans, and offering support to improve adherence to these plans. It may include switching to combined inhalers or using smart inhaler technology.

Evidence of Impact: Simplifying treatment with single-inhaler triple therapy can reduce asthma and COPD flare-ups and hospital admissions by around 20% and cut COPD-related healthcare costs by 25%.⁷⁰ With ideal inhaler use, up to 90% of people with asthma could reach good control, preventing thousands of avoidable admissions.⁷¹

Size of the Prize: In Bristol there are around 6,000 admissions for respiratory illness, a 20% reduction could therefore prevent an estimated 1,200 unplanned hospital admissions per year.

Spirometry testing in primary care improves early and accurate diagnosis of asthma and COPD.

Pulmonary rehabilitation programmes offer structured exercise and education for people with COPD, helping to reduce breathlessness and hospital admissions.

Pulmonary rehabilitation is highly effective, yet fewer eligible COPD patients in deprived communities participate than people living in the least deprived areas⁶⁹.

Pulmonary Rehabilitation for COPD

What it is: Pulmonary rehabilitation (PR) is a structured programme that combines physical exercise, education, and support for people living with COPD. It is usually offered after a hospital admission and helps patients manage symptoms, improve fitness, and reduce future episodes.

Evidence of Impact: Starting PR soon after discharge can reduce readmissions by nearly 50% over the next year.⁷⁶ It also lowers the number of hospital bed days from 9.6 to 4.8 in 6 months.⁷⁷ People who take part report better breathing, improved physical function, and better quality of life.

Size of the Prize: In Bristol, around 10,000 people are living with COPD, and 1 in 5 emergency hospital admissions for respiratory

Cost and Value for Money: Medicines optimisation is backed by strong evidence of cost-effectiveness. The cost per quality-adjusted life year gained ranges from £4,104 to £6,418, which is well within accepted NHS thresholds. Hospital admissions due to asthma cost between £1,500 and £2,500 per night, a 20% reduction in admissions could save between £1.8 and £3 million per year in Bristol.⁷²

Equity Impact: Asthma and COPD disproportionately affect deprived communities. People in the most deprived areas are twice as likely to be admitted to hospital and die from a lung condition compared to the least deprived.

MEDICINES OPTIMISATION FOR ASTHMA AND COPD



90% of people with asthma could achieve good control with optimal inhaler use



Single inhaler triple therapy reduces asthma and COPD flares and reduce hospital admissions by 20%



There are around **6,000** respiratory admissions per year....

....this could prevent **1,200** unplanned admissions each year in Bristol

A 20% reduction in admissions could save £1.8 to £3M per year in Bristol

In Bristol, COPD admissions are five times higher in the most deprived quintile.^{73,74}

Barriers such as complex inhaler treatment routines, low health literacy, and language needs contribute to poor control.

Medicines optimisation, combined with tailored education and community pharmacy reviews, can help reduce these inequalities.⁷⁵

illness are due to COPD.³⁰ Improving PR uptake to reduce readmissions by 20% could prevent an estimated 240 admissions per year in Bristol.

Cost and Value for Money: Pulmonary rehabilitation avoids around £245 in hospital costs in the first year alone. It is considered cost-effective up to £1,545 per person, making it one of the most efficient ways to reduce repeat admissions for COPD.⁷⁸ With each hospital admission costing between £1,900-£5,000,⁷⁹ reducing readmissions by 20% could save £4.5-£11.9 million over 10 years for Bristol.

PULMONARY REHABILITATION FOR COPD

is a programme of support for people living with COPD and usually offered after a hospital admission.



50% reduction in risk of hospital readmission in a year after starting the programme



1 in 5 people living with COPD will have an unplanned hospital admission



Improving uptake of Pulmonary Rehabilitation could reduce hospital admissions by 20%

which could prevent around 240 admissions per year in Bristol

Equity Impact: Despite its benefits, pulmonary rehabilitation is underused in deprived populations. COPD admissions are more than 5 times more common in the most deprived quintile where PR uptake is lowest⁸⁰.

Improving access through transport support, digital PR options, and community-based delivery can help improve PR uptake and therefore health outcomes.^{81,82}

2.7 Best buys - Cancer prevention

Early detection of cancer is one of the most effective ways to improve survival and reduce the need for intensive treatment. Screening programmes for breast, cervical, bowel, and lung cancer are well-established and supported by strong evidence. Screening rates are lowest for GP practices in Inner City and East (ICE) and for some screening programmes in South Bristol.

Early presentation, referral and screening for cancer are important for getting the best outcomes following a diagnosis. The NHS long-term plan has a target for 75% of cancers to be diagnosed by Stage 1 and 2.

These interventions are cost-effective and widely accepted, but uptake varies significantly across different population groups. Improving access and engagement, especially in deprived areas and among ethnic minority communities, is key to maximising their

“Best Buys”: Cancer screening

Targeted Lung Health Check Programme

What it is: This programme offers low-dose CT scans to current and former smokers aged 55 to 74 in areas with high rates of lung cancer. It is designed to detect lung cancer earlier, before symptoms appear. Checks can be delivered via mobile scanners in convenient community locations (e.g. supermarket car parks).

Evidence of Impact: Around 76% of cancers detected through this programme are found at stage I or II, compared to just 29% through routine diagnosis.⁸⁵ Early detection significantly improves survival and reduces the need for intensive treatment. Trials show a 24% reduced risk of death from lung cancer in those screened over 10 years.⁸⁶

impact. Uptake of cervical screening and breast cancer screening is lower among deprived, non-English-speaking, and minority ethnic women and people with a learning disability^{83,84}

The main interventions include breast cancer screening through routine mammograms for women aged 50 to 70, cervical screening using HPV testing for women aged 25 to 64, and bowel cancer screening using home-based faecal immunochemical tests for adults aged 56 to 74.

The Targeted Lung Health Check programme offers low-dose CT scans to current and former smokers aged 55 to 74 in areas with high lung cancer risk. These programmes help detect cancer at earlier stages, when treatment is more effective and outcomes are better.

Bowel Cancer Screening Programme

What it is: The NHS Bowel Cancer Screening Programme offers a home-based Faecal Immunochemical Test (FIT) every two years to adults aged 56-74 (with phased extension to 50+). A positive FIT leads to colonoscopy for further investigation.⁹⁰

Evidence of Impact: FIT testing detects around 91% of stage I colorectal cancers, and has been shown to reduce mortality from colorectal cancers in those screened regularly by 13%⁹¹ Screening also leads to earlier stage detection with a 32% reduction in late stage (stage IV) cancer, which improves survival from <10% in late stage to >90% in early stage.⁹²

Size of the Prize: TLHC is currently available in 25% of the national population, with an aim to be fully available by 2030. In the initial roll out phase, uptake of invitations was 42% nationally. If Bristol could achieve an uptake of 75%, of its roughly 56,000 eligible 55-74 year olds, we estimate an 92 additional cases of lung cancer could be detected, of which 69 would likely be earlier stage (stage I or II).

Cost and Value for Money: Modelling suggests the programme is cost-effective at approximately £8,466 per quality-adjusted life year gained for high-risk individuals.⁸⁷ The estimated cost per case of lung cancer is the highest of all preventable cancers at £916k, and the QALYs lost from lung cancer is also the highest. New preventable cancers are predicted to cost the wider UK economy £1.88 trillion between 2023 and 2040, to which lung cancer contributes the largest share.⁸⁸ Earlier detection through screening could therefore save the UK billions of pounds.

TARGETED LUNG HEALTH CHECK PROGRAMME

offers scans for former smokers in areas with high rates of lung cancer, particularly in areas of high deprivation

Cancers detected at Stage 1 and 2....



If 75% of Bristol's eligible population were screened under the programme



Equity Impact: TLHC was designed to narrow inequalities by taking scanners to where people are, with ~70% of checks delivered in mobile units in the initial phase and a deliberate focus on more deprived areas. National programme data also show earlier-stage diagnosis has improved in the most deprived groups since TLHC began.⁸⁹

Size of the Prize: Uptake of bowel screening in the South West is 72.1%, above the England average (67.6%).⁹³ This uptake level prevents approximately 8 premature deaths from colorectal cancer over 10 years. If Bristol could increase its uptake rate to 90%, this would translate to approximately 12,500 additional people screening every 2 years, potentially preventing 2 additional deaths from colorectal cancer over 10 years.

Cost and Value for Money: The total cost of treating the colorectal cancer diagnosed at stages I and II is much lower than later stages. The estimated cost to treat stage I colon cancer £3,559 compared with £13,206 for stage IV.⁹⁴ Bowel cancer costs the UK economy £1.74 billion annually, including wider costs to the economy.⁹⁵ FIT screening is highly cost-effective (£3,500-£6,000/QALY) and prevents expensive late-stage treatment, while also reducing productivity losses and unpaid care burden.⁹⁶

BOWEL CANCER SCREENING PROGRAMME

offers a home based test every 2 years to help identify bowel cancer at the earliest stages



If Bristol increased uptake of Bowel Screening to 90%.....

...this would lead to 12,500 additional people screened for bowel cancer every 2 years

Equity Impact: Uptake of bowel cancer screening is lowest among people in deprived areas, men, and ethnic minority groups, often due to barriers such as low health literacy and language challenges.⁹⁷ Screening uptake in the South West for the most deprived quintile is 58.7% compared to 77.9% in the least deprived.⁹⁸

Evidence shows that GP-endorsed invitation letters combined with personalised text reminders can increase screening uptake, in underserved populations.⁹⁹

2.8 Best Buys: Mental and physical health opportunities

Mental Health and physical health are closely connected, and people with severe mental illness often experience significantly worse physical health outcomes.

Many die 15 to 20 years earlier than the general population, often from preventable conditions such as cardiovascular disease and diabetes. People with severe mental illness (SMI) also receive *fewer* physical health checks.

Physical health checks are simple, evidence-based, and cost-effective, and they play a vital role in reducing avoidable admissions and improving quality of life. This includes monitoring blood pressure, cholesterol, glucose levels, body mass index, and lifestyle factors such as smoking and physical activity.

These checks are usually delivered in primary care and supported by mental health services. They help ensure that physical health needs are not overlooked and that people receive timely support to reduce their risk of serious illness.

Physical Health Checks for People with Severe Mental Illness

What it is: This intervention offers a yearly health check for adults with severe mental illness (SMI). It includes basic physical measurements and lifestyle advice and is designed to identify early signs of physical health problems such as heart disease and diabetes.

Evidence of Impact: People with SMI die on average 15-20 years earlier than the general population, mostly from preventable physical illnesses such as cardiovascular disease and diabetes. On average, people with SMI who receive a physical health check have 20% fewer A&E visits, 25% fewer mental health admissions, and 24% fewer emergency physical health admissions per year.¹⁰⁰

Size of the Prize: In Bristol, ~5,000 people are on the SMI register.¹⁰¹ Uptake of annual physical health checks is 75.8%, above the national target of 75%. Increasing uptake to 90% would mean around 750 additional people receiving a check. We estimate that improving uptake to 90% could prevent around 90 emergency admissions each year.

Cost and Value for Money: Although precise ROI figures are limited, these checks are considered highly cost-effective because they prevent avoidable hospital admissions and support early treatment of conditions like diabetes and cardiovascular disease, which are major drivers of premature mortality in this group.¹⁰²

Equity Impact: People with SMI experience some of the widest health inequalities in England, driven by higher rates of poverty, smoking, poor diet, and side effects of medication, combined with barriers to accessing preventive care. Uptake of health checks is lower among people from deprived areas and minority ethnic groups. Evidence suggests that community outreach and tailored support, such as offering checks in community settings and using health coaches, alongside proactive follow-up and integration with mental health services, can improve uptake and help close this gap.¹⁰³

2.9 Best buys - Musculoskeletal conditions

Musculoskeletal conditions are one of the leading causes of disability and reduced quality of life. They affect mobility, independence, and mental wellbeing, and are a major driver of healthcare use, particularly in primary care.

Early and proactive interventions can prevent chronic pain, reduce unnecessary hospital visits, and improve long-term outcomes.

Key interventions include First Contact Physiotherapy, which allows patients to see a specialist physiotherapist directly in their GP practice without needing a referral.

“Best Buys”: Musculoskeletal Conditions

First Contact Physiotherapy (FCP)

What it is: FCP places musculoskeletal physiotherapists directly in GP practices, allowing people with joint or back pain to access expert care without needing to see a GP first. This speeds up treatment and reduces pressure on general practice.¹⁰⁵

Evidence of Impact: People who access FCP recover faster, with 72% reporting improvement within three months compared to 55% under GP-led care. It also leads to a significant reduction in opioid prescribing.¹⁰⁶

Size of the Prize: MSK problems make up 30% of GP appointments. If 10,000 GP appointments per year in Bristol were diverted to FCP, that could translate to 2,000-2,600 fewer people started on medication including opioids, reducing side-effects and downstream costs.⁷⁰

Care models like STarT Back help identify people at higher risk of persistent back pain and match them to the right level of support. Fracture Liaison Services provide coordinated care for older adults who have experienced a fracture, helping to prevent future fractures and reduce hospital admissions.

For musculoskeletal and mental health, compared with other disease areas there is relative lack of evidence-based approaches to secondary prevention, despite their impact on ill health across our population.¹⁰⁴

Fracture Liaison Service (FLS)

What it is: FLS is a coordinated service for people aged 50 and over who have had a fracture. It assesses bone health, provides treatment for osteoporosis, and supports long-term management to prevent further fractures.

Evidence of Impact: FLS significantly reduces the risk of secondary fractures by 10-34% and of death by 15-18% within 5 years.^{107,108} It improves outcomes for older adults and helps avoid long-term complications from untreated osteoporosis.

Size of the Prize: Bristol sees ~370 hip fractures annually.¹⁰⁹ Applying the “rule of 5”¹¹⁰ this suggests ~1,850 fragility fractures each year. With 80% FLS coverage and a 30% risk reduction, around 111 re-fractures could be prevented over five years, including 22 hip fractures.

Cost and Value for Money: FCP is around 2.5 times cheaper than GP-led care, with an average NHS cost of £41 per patient compared to £105. It is considered highly cost-effective and helps reduce unnecessary referrals and investigations.⁷⁰

FIRST CONTACT PHYSIOTHERAPY (FCP)

allows access to physiotherapists based at a GP practice without the need to see a GP first

30% of GP appointments are for Musculoskeletal problems

72% of those who access FCP report improvement within 3 months

Benefits of FCP....

Faster recovery times 

Reduced opioid prescribing

Reduces unnecessary referrals and investigations 

If 10,000 GP appointments per year were diverted to FCP in Bristol, This could lead to 2000-2600 fewer people started on medication

Equity Impact: Placing physiotherapists at first contact in primary care lowers barriers created by traditional referral pathways (waiting times, multiple visits).

This improves timely access in underserved areas, supports people who struggle to navigate multi-step pathways, and reduces avoidable GP attendances and onward referrals, which tend to disadvantage those in more deprived communities.⁶⁹

Cost and Value for Money: Hip fractures cost around £14,600 per admission. Avoiding 22 hip re-fractures could save £0.32m over five years, excluding wider savings from other fractures and social care.¹¹¹ Fragility fractures cost the UK ~£4.4bn annually with hip fractures accounting for ~69k admissions in England and >1.3m bed days per year, so even small percentage reductions deliver substantial absolute savings.¹¹²

FRACTURE LIAISON SERVICE (FLS)

Supports people over 50 who have had a fracture to help prevent further fractures

£14,600 PER HOSPITAL ADMISSION FOR HIP FRACTURE

THERE ARE **1,850** FRAGILITY FRACTURES PER YEAR IN BRISTOL

WITH **80%** FLS COVERAGE

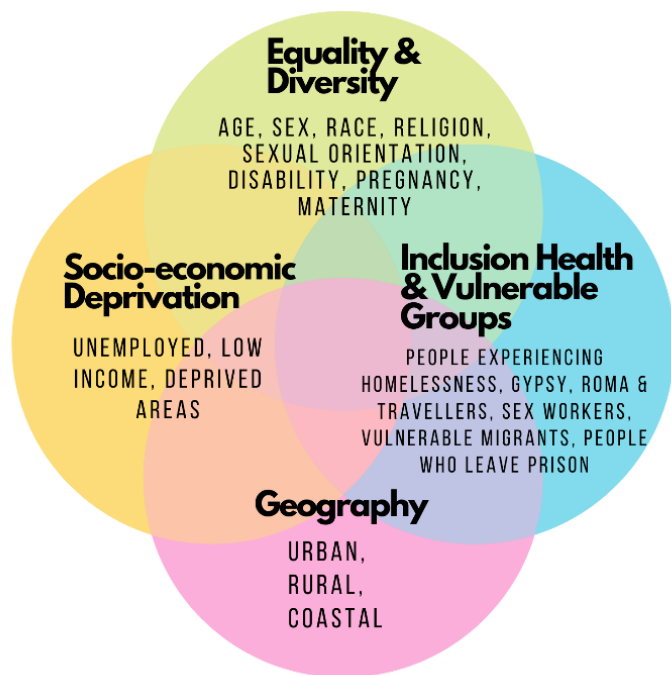
AND **30%** RISK REDUCTION

This could prevent 111 re-fractures in Bristol over a 5 year period

Equity Impact: Hip fracture rates and poor outcomes are higher in more deprived groups, who also face barriers to bone health care.¹¹³ FLS aims to reduce these inequities by standardising patient identification and treatment, implementing outreach, transport support, and culturally tailored education.¹¹⁴

3.0 Tools for addressing inequity

Figure 9 Domains of Inequality¹¹⁵



Despite the availability of many effective, evidence-based secondary prevention interventions, people in deprived areas and minority ethnic groups may experience significantly lower uptake, delayed diagnosis, and poorer outcomes.

Targeting our prevention services and treatments more effectively for those groups with highest need or lower uptake in these programmes, is where we will get the best value.

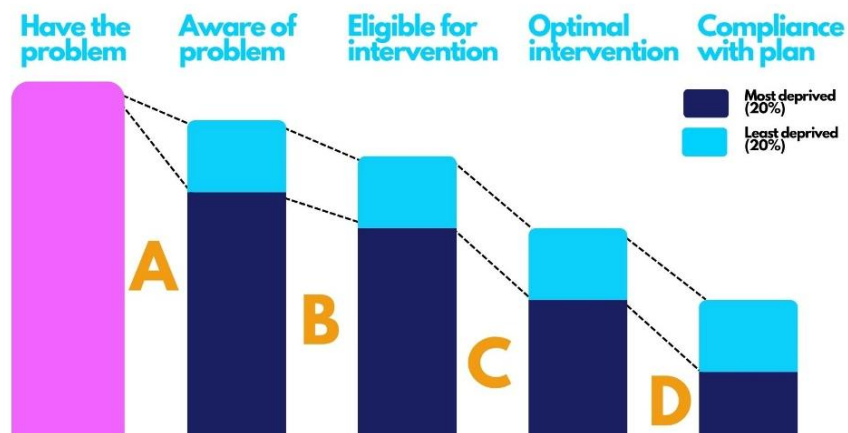
These groups include people from across the domains of inequality as shown in Figure 9 such as people in ethnic minority communities, people with learning disabilities and autism, people with long term conditions and people with vulnerabilities such as those experiencing homelessness or drug and alcohol dependence¹¹⁶

To make services more equitable, all parts of the healthcare system can do things to improve access. This could include monitoring access to services, tailoring communication and offering additional support to access appointments, if required.

Everybody, whatever part of the system can take responsibility to improve access for our population who might need a bit more help to access the care they need, as early as possible for better outcomes.

We know that for people living in the most deprived populations intervention decay happens at a faster rate at every stage of an intervention or pathway (Figure 10).

Figure 10 Components of Implementation Decay (Bentley, C, 2019)



This means that people may be less likely to recognise risks, have barriers in accessing help, experience differences in their care and may have difficulties in the management of their condition.

Barriers to access and uptake contribute to this lower benefit in some groups, with fewer individuals receiving and continuing with optimal treatment for prevention.

Using the intervention decay model and comparing data across groups (e.g., most vs. least deprived, male vs. female, ethnic minority groups vs. white British) reveals where inequalities in uptake and outcomes exist, helping to identify priorities to address them.

Barriers to engaging with an intervention:

Knowledge and trust: Many people at the highest risk are least likely to access secondary prevention. Low health literacy, fear of diagnosis, and mistrust of healthcare systems, particularly among ethnic minorities and people with mental illness, undermine engagement from the outset.

Structural exclusion: Inflexible clinic hours, digital-only access, language barriers, and poor transport links can make services hard to reach for those in deprived areas. Standard models assume people can and will opt in, but many cannot.

Service design: Current delivery often reinforces inequality by favouring those already engaged in care. Without tailored communication or follow-up, interventions fail to reach those who need them most.

Hypertension through an intervention decay lens: Management of High Blood Pressure in Black African and Black Caribbean communities

	How does inequity develop?	What can be done to tackle this?
<p>A: Awareness: under recognition of risks / illness and sources of help by individuals.</p>	<p>Black African, Caribbean or Black British least likely to take up offer of Health Check (27.5%) compared to Asian/Asian British (31.8%), Mixed or multiple ethnic groups (34.8%), other ethnic group (34.7%) and White ethnic group (44.3%).</p>	<p>Media campaigns, community engagement events</p> <p>Improved health messaging¹¹⁷</p>
<p>B: Navigation: the risk or the illness is identified but there are barriers and / or access issues to sources of help or intervention</p>	<p>Barriers reported including: health literacy, Health beliefs, Medical mistrust, Lack of interpersonal care, Lack of cultural competency, Communication from clinicians</p> <p>Having awareness but reluctance for diagnosis – e.g) may impact on health insurance. See Case Study 2.</p>	<p>Staff training on cultural competency and health literacy training¹¹⁸.</p> <p>Use of phone, texts, letters and interpreters¹¹⁹</p> <p>Health checks in community venues ¹²⁰</p>
<p>C: Quality: unwarranted variation in the quality of support or intervention provided</p>	<p>People in the Black ethnic group have the lowest rates of management of high blood pressure to appropriate treatment threshold (52.14%)¹²¹</p> <p>National evidence shows that there are differences in access to care for CVD. Access to care for Black groups is worse compared to other ethnic minority groups¹²².</p>	<p>Targeted approaches to case finding in primary care record searches¹²⁰</p> <p>Supporting engagement with care either through face to face or telephone appointment with dedicated team (pharmacy/HCA)¹¹⁹</p> <p>Ensure pathways exist for patients who are identified in different settings e.g. Emergency Department¹²⁰.</p>
<p>D: Self-management: insufficient assets for 'recovery' or support for self-management</p>	<p>50 to 80% of patients with high blood pressure do not take all of their prescribed medicine¹²³.</p> <p>Barriers to engaging with treatment and managing their condition, which included: concerns about medication, Skills to monitor BP at home/digital exclusion, fear of disapproval from clinicians if they stop medication See Case Study 2.</p>	<p>Pharmacies identify people with high blood pressure and refer onwards to general practice to confirm diagnosis or to support management. See Case Study 3.</p>

4.0 Looking ahead

While the biggest opportunities in prevention currently lie in expanding access to proven interventions, a growing number of novel approaches will shape the future. Many technologies remain in early stages of development or evaluation, but offer promise for transforming how prevention is delivered, through new treatments, smarter technology, and more personalised approaches.

This is why the new NHS 10 Year Plan¹³ focuses on the three shifts of treatment to prevention, the main focus of this report, alongside a shift from hospital to community care and analogue to digital. There is also a stronger focus on delivering care in the community through Neighbourhood Health^{124, 125}.

New medications and treatment approaches

Many different medicines are being tested to see if they can help prevent heart problems. One example is the 'polypill,' which combines several medicines into one pill to lower blood pressure and cholesterol at the same time. This approach has shown promising results in reducing heart attacks and strokes, especially for people who have trouble taking multiple medicines.

Weight loss drugs (GLP-1 receptor agonists) like semaglutide were made for diabetes, but are now being tested to help prevent heart problems and used manage weight. Early results are encouraging, they seem to lower the risk of heart issues and help with weight loss. In the future, they might become more widely available on the NHS, especially as NICE considers using them more broadly for prevention.

Artificial intelligence (AI) can help find health problems earlier and predict risks. For example, a project in the UK used AI to look at routine heart tests (ECGs) to estimate a person's chance of getting type 2 diabetes. This could help find people at high risk years before symptoms appear.

AI is also being tested for reading mammograms, eye scans, and prostate cancer tests. These tools could make testing more accurate and faster, reduce false results, and allow more people to be screened. However, it's important to carefully check that these tools are safe, fair, and helpful for all populations before they are used widely.

Mind-body and personalised interventions

Brief psychological interventions, such as mindfulness or therapy and support, are being embedded into long-term condition care to improve mental wellbeing, support people to manage treatment regimes and reduce complications.

Longer term, personalised prevention strategies using treatments that are tailored to the individual using genomics and biometrics may offer more targeted treatments. However, the infrastructure and evidence for this approach are still developing. Ensuring such advances are accessible and taken up by those most at risk will be a key challenge as new initiatives and treatments for prevention are rolled out.

5.0 Recommendations

This report has set out a number of practical; evidence-based ways to improve health and reduce unfair differences in healthcare. These can be summarised in seven high impact recommendations:

1. **Reduce variation in screening and immunisation programmes** by monitoring uptake and taking focussed action with communities
2. **Invest in best buys** to prevent, reduce or delay the impacts of major diseases and conditions.
3. **Improve uptake of health checks** for underserved and at-risk groups; and provide timely preventative interventions.
4. **Use digital tools** to support prevention, include digital options (like apps or online tools) as part of the mix to help people take care of their health.
5. **Use data** to understand and improve access. Make sure we can see data by things like ethnicity, income, disability, and other factors, so we know if services are reaching people fairly.
6. **Work closely with communities and neighbourhood health providers** to understand barriers and identify solutions.
7. **Use Every Opportunity to Support Prevention:** Whenever health or care staff meet with someone, they should look for chances to check health risks, give advice, start treatment, or refer people for help. Prevention should be part of everyone's job.

Thank you for reading this report, and I hope, joining the movement to prevent disease and achieve healthier lives.

Acronyms

ACT Alcohol Care Teams

AI Artificial Intelligence

BNSSG Bristol North Somerset and South Gloucestershire

CHWs Community Health Workers

COPD Chronic Obstructive Pulmonary Disease.

CT Computed Tomography scan

CVD Cardiovascular Disease.

DALYs Disability adjusted life years

DHSC Department of Health and Social Care

ECGs Electrocardiograms

FCP First Contact Physiotherapy

FIT Faecal Immunochemical Test

FLS Fracture Liaison Service

GPs General Practitioners

HPV Human papillomavirus

ICD-10 International Classification of Diseases 10th Revision

ICE Inner City and East

ICS Integrated Care System

LDL low-density lipoprotein cholesterol

LTCs Long Term Conditions

MSK Musculoskeletal

N&W North and West

NDPP NHS Diabetes Prevention Programme

NICE National Institute for Clinical Excellence

OHID Office for Health Improvement and Disparities

ONS Office for National Statistics

PR Pulmonary rehabilitation

ROI Return on Investment

SB South Bristol

SMI Severe Mental Illness

SWAG Somerset, Wiltshire, Avon and Gloucestershire Cancer Alliance

TLHC Targeted Lung Health Check Programme

UHBW University Hospitals Bristol and Weston NHS Foundation Trust

UKHSA UK Health Security Agency

YLD Years Lived with Disability

YLL Years of Life Lost

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