Making the case for public health interventions

Public health spending and return on investment

These infographics from The King’s Fund and the Local Government Association set out key facts about the public health system and the return on investment for some public health interventions. You are welcome to use them in your office, in documents or presentations but please credit The King’s Fund and Local Government Association wherever you do this.
The importance of public health

Our health is determined by our genetics, lifestyle, the health care we receive and our wider economic, physical and social environment. Although estimates vary, the wider environment has the largest impact.


- Health care (43%)
- Other factors (57%)


- Health care (15%)
- Social circumstances and environmental exposure (45%)
- Health behaviour patterns (40%)

Canadian Institute of Advanced Research (2012)

- Health care (25%)
- Socio-economic (50%)
- Environmental (15%)
- Genetics (15%)
Spending and costs

In 2013/14 the Department of Health spent more than £106 billion on health, social care and public health in England. Average NHS spending per head was £1,742, while grants to local authorities for public health averaged £49 per head.
Spending and costs

In 2013/14, the Department of Health spent around £5.48 billion on public health - around 5.1 per cent of their total spending. Almost half of this - £2.66 billion - was given to local authorities as grants.
Spending and costs

In 2014/15 the Department of Health allocated £2.79 billion to local authorities in public health grants. These ranged from £185 per head to £22 per head.
Over the next 20 years the number of people in England aged 65-84 will increase by more than a third, and the number aged 85 and above will more than double.
Life expectancy

The average life expectancy in England has been increasing. In 1981 it was 70.9 years for men and 76.9 years for women. In 2014, it is expected to be 79.4 years for men and 83.3 years for women.
Life expectancy

There are wide variations in life expectancy between different populations. For women, the difference between the regions with the highest and the lowest life expectancy is 2.3 years. Across local authorities that difference is 7.1 years. Within a single local authority the variation based on deprivation can be as much as 8.6 years.
Healthy life expectancy
People living south and west of London have a far higher healthy life expectancy than people in the north, Midlands and parts of east London. In 2010-12, the healthy life expectancy for women ranged from 52.6 years within Bradford Clinical Commissioning Group to 71.3 years within Guildford and Waverley Clinical Commissioning Group.
Disability-free life expectancy
According to the latest data (1999 to 2003), people living in the poorest neighbourhoods in England will, on average, die 7 years earlier than those in the richest. They also live their lives with more illness. The average difference between the poorest and richest neighbourhoods in disability-free life expectancy is 17 years.
Health and behaviour

Latest figures show that 2 in 10 adults are smokers. 7 in 10 men and 6 in 10 women are overweight or obese. A third of people have drinking patterns that could be harmful. Half of women and a third of men do not get enough exercise.
Health and behaviour

Multiple unhealthy behaviours have a cumulative effect on health. Someone in mid-life who smokes, drinks too much, exercises too little and eats poorly is four times as likely to die over the next 10 years than someone who does none of those things. Inequality in this area has increased: the rate of multiple unhealthy behaviours has decreased overall but not within the poorest parts of society.
Forty per cent of the UK’s overall disability-adjusted life years lost are caused by tobacco, high blood pressure, overweight and obesity and low physical activity (2010 figures). This is through their contribution to diseases such as heart disease, stroke and lung cancer.
Health and behaviour

Unhealthy lifestyles cost the NHS across the UK billions of pounds every year. Smoking costs £5.2 billion, obesity £4.2 billion, alcohol £3.5 billion and physical inactivity £1.1 billion.
Health and behaviour

Mental illness is by far the most common illness for people aged 15–44 years. The incidence of mental illness rises as you get older, but across all ages up to 65 years, mental illness is nearly as common as physical illness.
Health and behaviour
As of 2010, musculo-skeletal problems - such as back pain and arthritis - are the most common conditions to limit people's daily activities and the largest single cause of years lived with disability. They affect 8.3 million adults and 10,000 children in England.
Children aged 11-15 years

**2003**
- Ever taken drugs
- Ever smoked at least once
- Drank alcohol in the last week

**2013**
- Ever taken drugs
- Ever smoked at least once
- Drank alcohol in the last week

**Health and behaviour**

Children’s health behaviours have improved dramatically over time. Reported use of drugs, smoking and alcohol have all roughly halved over the past 10 years.
Spending and costs

In 2014/15 local authorities are committed to spend £671 million (almost a quarter of their overall grant from the Department of Health) on sexual health services. During 2013/14 there were approximately 450,000 diagnoses of sexually transmitted infections in England.
Spending and costs
The costs of health and care services are not widely known. Some costs can be avoided or reduced through cost-effective public health interventions.

- **£31**: 10 minutes with a GP
- **£114**: A&E attendance
- **£235**: Ambulance journey to hospital
- **£792**: Year of telecare
- **£3,283**: Inpatient stay in hospital
- **£10,424**: Final year of life
Return on investment

The costs to society of transport-induced poor air quality, ill-health and road accidents exceed £40 billion per year. Getting one more child to walk or cycle to school could pay back as much as £768 or £539 respectively in health benefits, NHS costs, productivity gains and reductions in air pollution and congestion.
Return on investment
Every £1 spent preventing teenage pregnancy saves £11 in health care costs.
Return on investment
School-based public health interventions can be good investments. For example, smoking prevention programmes in schools can return as much as £15 for every £1 spent.
Return on investment
Parenting programmes to prevent conduct disorder pay back £8 over six years for every £1 invested.
**Return on investment**

Birmingham’s Be Active programme of free use of leisure centres and other initiatives returned an estimated £23 in quality of life, reduced NHS use and other gains for every £1 spent.
Return on investment

Housing interventions to keep people warm, safe and free from cold and damp are an efficient use of resources. Every £1 spent on improving homes saves the NHS £70 over 10 years.
Return on investment

Worklessness costs the economy more than £100 billion every year. Business in the Community estimates that its programmes getting disadvantaged groups back into work return £3 in reduced costs of homelessness, crime, benefits and NHS care for every £1 spent.
Return on investment

Social support plays an important role in increasing resilience to illness, helping recovery and improving wellbeing. Befriending services have been estimated to pay back around £3.75 in reduced mental health service spending and improvements in health for every £1 spent.
Return on investment

Every £1 spent on motivational interviewing and developing supportive networks for people with alcohol or drug addiction returns £5 to the public sector in reduced health care, social care and criminal justice costs.
Return on investment
Every £1 spent on drugs treatment saves society £2.50 in reduced NHS and social care costs and reduced crime.
We hope you found these slides useful.

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For more information on this topic visit www.kingsfund.org.uk/publichealth or www.local.gov.uk/health.