Prevention – what our Political Masters need to know

An analysis for Allander Probus of some measures that could be taken to ease the load on the NHS

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Prevention and the NHS

In 1975 the main challenges to the NHS were:

- Cardiovascular disease
- Cancer

In 2023 the main challenges to the NHS are:

- Diabetes
- Mental health

Prevention

In the early 1990s evidence emerged that, using appropriate agents, the incidence of hormone-dependent breast cancer could be reduced.

Diet is known to influence the incidence of a number of cancers.

Eliminating smoking would reduce lung cancer by over 90%

Prevention – what it can do for us

Prevention can both save the NHS money and reduce patient numbers but this will take time

Prevention can extend your life

Prevention

A *Lancet Study predicts:*

By 2030 one billion people will suffer from Diabetes.

Diabetes is one of the biggest health threats of our time (Professor Shivani Agarwal).

About 9 in 10 cases of Diabetes in the UK are Type 2 diabetes.

The condition is increasingly common in those under 40 and those living in areas of deprivation.

Prevention

Obese patients cost the NHS twice as much as those of healthy weight.

The heaviest people cost the NHS £1,375 per year. People in the normal weight range cost the NHS about £750 per year.

90% of parents of obese children do not realise that their children are overweight.

NHS could save £14 billion per year if everyone was a healthy weight (European Congress on Obesity).

Obesity has a strong link with Type 2

Prevention

About 184,000 preventable cancers were diagnosed in the UK in 2023 (Cancer Research UK).

Overall, preventable cancers in 2023 cost the UK £78billion (£40 billion in lost productivity, £30 billion in costs to patients, £3.7 billion in healthcare costs, £1.3 billion in social care). (Report from *Frontier Economics*).

Prevention

There is a dramatic increase in young people dying from bowel cancer (39% increase from 2019-2024 for women under 50) due to lifestyles becoming less healthy (Carlo La Vecchia)

Causes include obesity, high blood sugar levels and diabetes, reduction in physical activity.

No change, or a small decrease, for those over 50 – generally less likely to be overweight or eating poor diets.

Prevention

Smoking could cause 1 million new cancer cases by 2040.

35,000 people die from lung cancer each year in the UK.

Smokers are 2.5 times more likely to need hospital treatment for mental disorders.

21 million people could be obese by 2040 increasing their risk of over 13 types of cancer (CRUK) and of Type 2 diabetes.

Prevention

People who smoke marijuana when aged 13-18 have a much higher chance of developing mental health problems as they grow older, in comparison with those who do not smoke marijuana at all.

Marijuana can worsen respiratory conditions, cardiovascular function, memory and cognitive function in all ages.

Prevention

One in 10 young people is too sick to work full-time.

Over 1.1 million 16-34 year-olds report long-term health conditions that limit their ability to work.

Two in five of these cite mental health issues.

If we could reduce drug-influenced brain damage in teenagers, could we reverse this trend?

Prevention

Solutions should include

reducing smoking (nicotine &/or marijuana),

eating a greater proportion of un- or lightly-processed foods,

taking more exercise,

exploring other causes of cancer, cardiovascular disease and mental health disorders.

Prevention

The Down Side

Problems arise if authorities ban anything!

Cigarette smuggling is already significant and would rise quickly if tax levels are further increased.

Warning teenagers to avoid any drugs might have the reverse effect and encourage exploration of existing and new drugs.

Prevention

Bribery

Some Insurance companies already reward clients who take a certain amount of exercise every day.

Give tax breaks to firms who reduce the amount of highly processed foods in their products.

Make 70% cocoa solids chocolate cheaper than milk chocolate.

Continue the push for lower sugar contents in soft drinks.

Prevention

Prevention

There are a number of steps that Government could take to significantly reduce costs to the NHS. Most of these require initial investment and will not see a return within the time period of a single term in office.

Public opinion needs to show Government that good health is good for the Nation!

Prevention

Reducing highly processed foods in our diets and increasing minimally processed food could reduce overall cancers by over 10% (including head & neck cancers, rectal cancers, hepatocellular cancers, post menopausal breast cancer).

Ultra-processed foods are also associated with increased heart disease, obesity and type 2 diabetes.

80% of Type 2 diabetes could be delayed or prevented

Up to half of cancers could be prevented by change to lifestyle or behaviour

If every women in the UK was regularly physically active, 9000 fewer would develop breast cancer each year

Up to **three-quarters** of **cardiovascular disease** is thought to be preventable

80% of strokes are preventable

Prevention

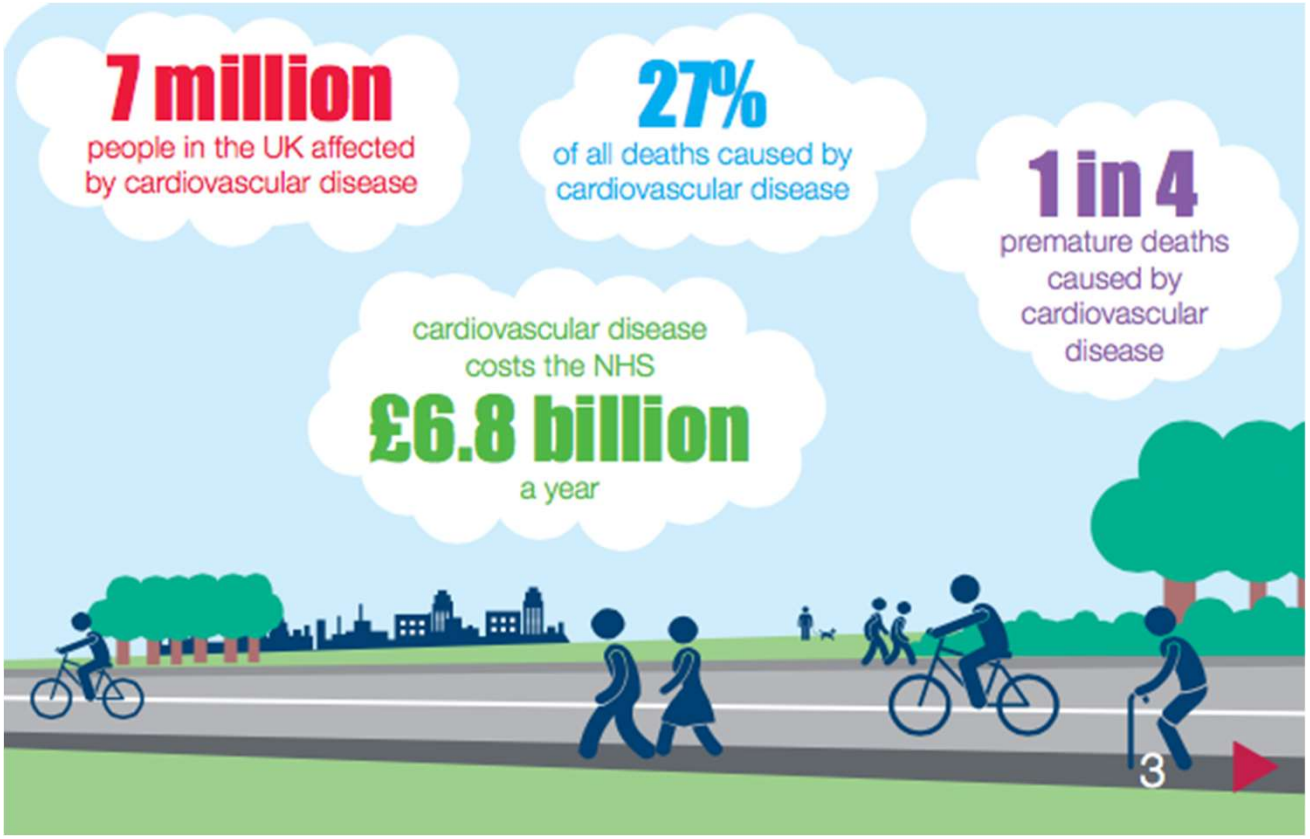
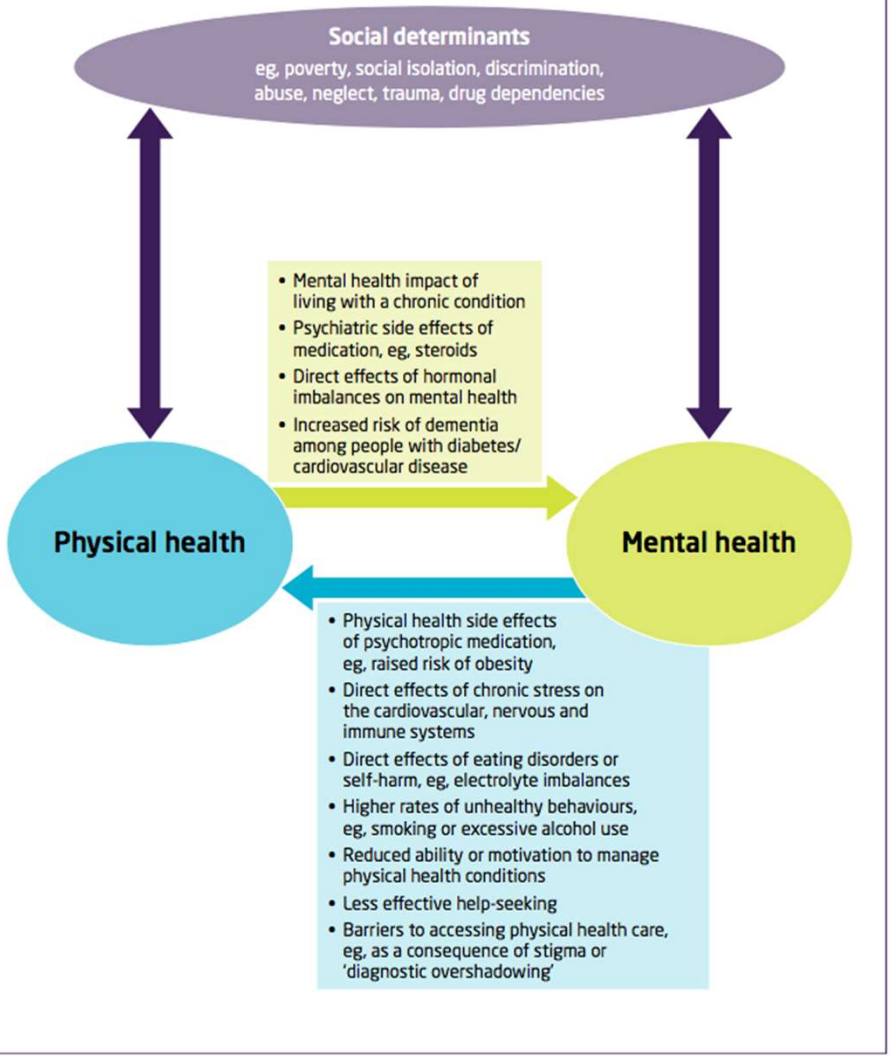
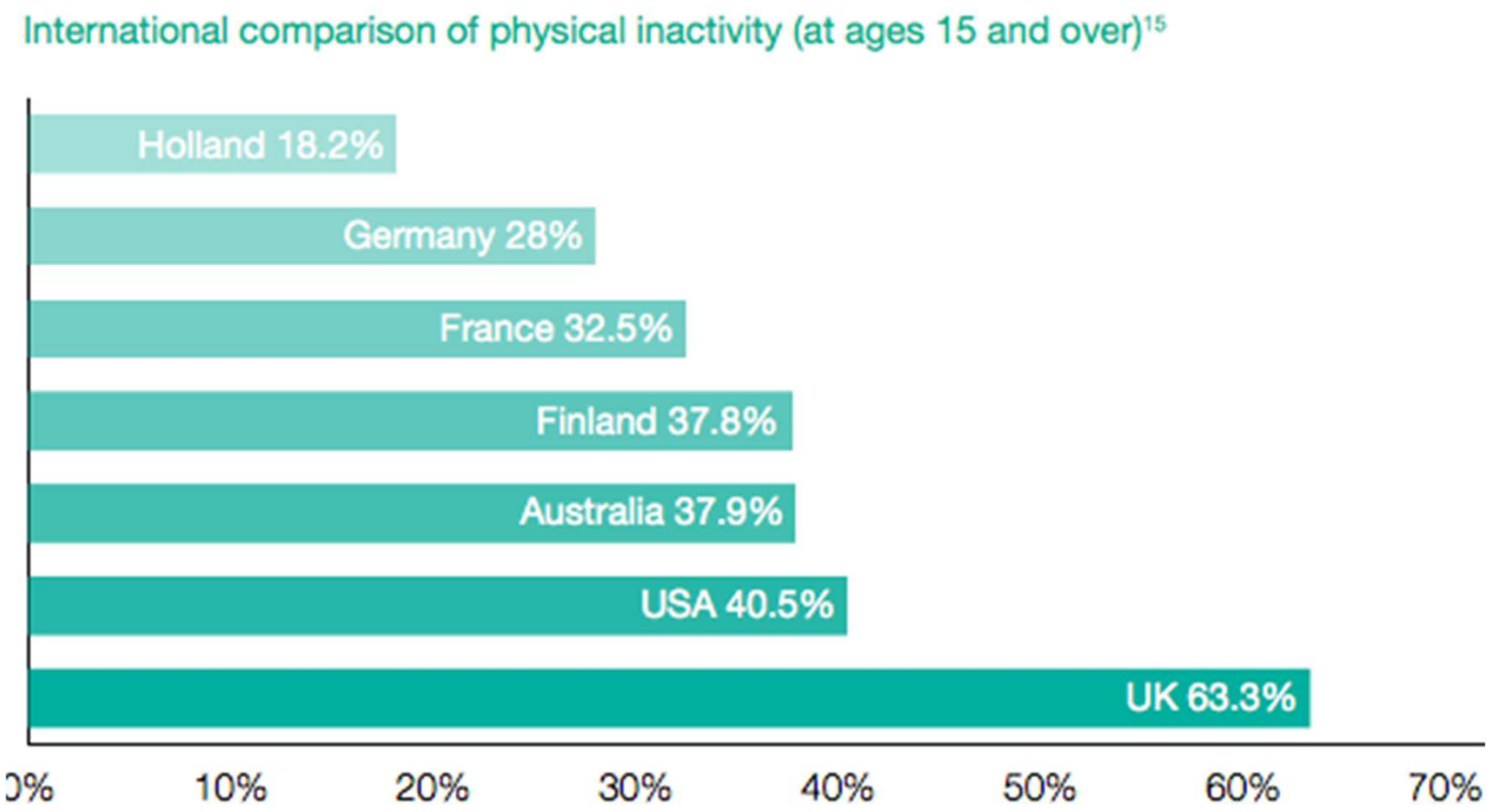

7 million
people in the UK affected by cardiovascular disease
27%
of all deaths caused by cardiovascular disease
1 in 4
premature deaths caused by cardiovascular disease
cardiovascular disease costs the NHS
£6.8 billion
a year
3

Figure 1 Mechanisms through which physical and mental health interact



Prevention


International comparison of physical inactivity (at ages 15 and over)[15]
Holland 18.2%
Germany 28%
France 32.5%
Finland 37.8%
Australia 37.9%
USA 40.5%
UK 63.3%
0%
10%
20%
30%
40%
50%
60%
70%

Obesity hits the poorest hardest

- Excess weight (and tooth decay) is associated with deprivation.
- Children living in the most deprived communities are twice as likely to be very overweight as those in the least deprived.
- Studies have shown that high childhood BMI is associated with adult obesity as well as adult heart disease, diabetes and some cancers.
- Obesity and poor health often mean poor job prospects and vice versa.

- **Sugar reduction is just the start of a journey**

- There's so much to do if we want to reduce childhood obesity
- Government is working with the food industry to reduce sugar by 20%.

- They are focusing first on the nine food categories that contribute the most to children's sugar intake; cakes, biscuits, puddings, ice cream, confectionery, morning goods (such as croissants and muffins), yoghurts, breakfast cereals and sweet spreads.
- The biggest source of sugar in the diets of many young people is sweet drinks (coca cola, irn bru, red bull).
- At the same time, it makes sense to reduce salt levels in foods.

Prevention

Rising obesity among children during the pandemic is likely to cost the UK up to £8 billion.

Rates of obesity amongst 4-5 year olds rose by 45% during 2020-21.

The proportion of obese children aged 10-11 is still higher than before the pandemic.

This is likely to persist into adulthood and cost are based on potential sick leave and lost productivity

HEALTHY LIVING VALUES
• Steps or activity
• Sleep
• Nutrition
• Stress
• Weight
CLINICAL AND HEALTH CONDITION VALUES
• Blood sugar
• Weight changes
• Blood pressure
• Heart function
• Blood oxygen
$$$
EXPENSE AND BUDGET VALUES
• Affordability
• Deductible status
• Exposure
• Pharmacy costs
• Reward opportunities
SUMMARY
QUANTIFIED SELF, THE BRIDGE TO A PERSONALIZED HEALTH AND WELLNESS MARKETPLACE

SUMMARY
QUANTIFIED SELF, THE BRIDGE TO A PERSONALIZED HEALTH AND WELLNESS MARKETPLACE
Real-time personalized preventive health
Increased relevance and engagement through social communities
SMART CARE TEAM A PERSONALIZED ECOSYSTEM
Smart personalized shopping
SOCIAL AND EXPERT COMMUNITIES
EXCHANGES AND SHOPPING MARKET
HEALTHY LIVING REWARDS EXCHANGE

Prevention

- **CLANGERS:** *courtesy of Dr Phil Hammond*
  - **Connect with people and don't live in isolation from others;**
  - **Learn new things and continually challenge yourself;**
  - **Active;**
  - **Notice the world around you and savour the moment;**
  - **Give Back, do something nice for someone, smile, volunteer;**
  - **Eat well;**
  - **Relax, take time out to chill;**
  - **Sleep, getting 6-8 hours of good quality sleep is fundamental.**

Prevention

The human cost of obesity is huge

We can’t ignore the harm obesity causes.

Very overweight children face bullying, low self-esteem and school absence.

And we know that very overweight children are more likely to become overweight adults so it’s worrying that by 11 years old one in three of our children are already overweight or obese.

Obesity in adulthood is a leading cause of ill health and premature death, associated with serious but preventable illnesses like heart disease, type 2 diabetes and some cancers.

The most pressing challenges of the next decade

Helping **everyone stay well** for as long as possible whatever their current state of health. In particular, increasing the number of years in good health for our poorest citizens.

Addressing recent trends in **over-consumption, inactivity and obesity** which have the potential to overturn recent gains in life expectancy and healthy life expectancy.

Giving attention to **mental health and wellbeing** which can affect life chances and often coexist with physical health problems.

Continuing to address Scotland's challenge with harmful **alcohol consumption** and continuing our efforts on tobacco control to **reduce smoking further.**

Ensuring collective, cross-government and cross-sector effort focussed on prevention.

Prevention

I'VE REACHED THE AGE
WHEN MY TRAIN OF THOUGHT
OFTEN LEAVES THE STATION
WITHOUT ME

Prevention

Thanks

Professors Peter Boyle, Harry Burns, Mick Bulbrook, Steve Ohlsen and many others

Yourselves