

School for Public Health Research

Public Health Evidence Briefing

Building the evidence for cost-effective public health practice

Modelling value for money of diabetes prevention

- Over 35% of adults in England are thought to be at high risk of developing type 2 diabetes.
- Lifestyle changes can reduce the risk of developing diabetes and cardiovascular disease.
- The lifetime costs and health improvement of policies to reduce diabetes risk were estimated.
- A soft drinks tax and lifestyle education classes for individuals at high risk of diabetes were found to offer the best value for money.

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There are many policies targeting diet and physical activity to reduce the risk of diabetes and cardiovascular disease, but no evidence on their comparative value for money.

Key issues

- Diabetes incidence is a costly condition that increases the risk of many other complications, including cardiovascular disease.
- Effective public health policies that offer good value for money are needed to reduce the burden of diabetes in the United Kingdom.

What we did

A simulation model was developed to estimate the incidence of diabetes, cardiovascular disease and other complications for a typical English population.

NIHR SPHR researchers worked with a stakeholder group of researchers, diabetes epidemiologists, diabetes consultants, commissioners and diabetes patients to develop the model and select key policies to evaluate.

The lifetime healthcare costs and health impacts were estimated for a soft drinks tax, improved supermarket access to fruit and veg, workplace healthy eating promotion, community classes in diet, and a programme to identify individuals at high risk of diabetes and offer lifestyle advice.

Findings and implications

- Identification and lifestyle interventions for individuals at high risk of diabetes offers the best value for money to the NHS.
- A soft drinks tax would save the NHS money and the cost-savings and health benefits reduce health inequalities.
- All the policies will save the NHS money in the long-run and will reduce the burden of diabetes in the UK.

What next?

A tool has been developed for local authorities and clinical commissioning groups (CCGs) to estimate the return on investment of diabetes prevention in their area.

The model is being adapted to include dementia to evaluate the value for money of dementia prevention in the UK.

Evaluation of the NHS Diabetes Prevention Programme is being carried out with Public Health England.

References

- <https://www.ncbi.nlm.nih.gov/pubmed/26547089>
- <http://www.yhpho.org.uk/default.aspx?RID=235836>

SPHR Contact/Find out more about this study at:

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“The model is flexible to evaluate different types of interventions for different populations and has a huge potential to generate useful cost-effectiveness evidence.”
Penny Breeze- Researcher