

Eye Care Service in Scotland: Did the Scots Get it Right?

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Background

In 2006 the Scottish Executive, working towards the VISION 2020 declaration of eliminating avoidable blindness by 2020, introduced free eye care in Scotland and commissioned private ophthalmic optician practices to perform eye examinations. The redesign of eye care services in Scotland was introduced on 1st April 2006, with the primary aim of increasing the demand for eye examinations and thereby improving the visual health of the Scottish population through the early detection of eye health problems. This redesign of eye care provision had two main aspects. First, the introduction of free eye examinations to all individuals living in Scotland. Previously individuals in Scotland (similar to the rest of the UK) had to pay for sight tests out of pocket at a private optometrist. The policy redesign introduced a subsidised eye examination that allows anyone living in Scotland to have a 'free' eye examination funded by the NHS and carried out at any high street optometry practice. Second, the new eye examination was also a move away from the previous emphasis on a sight test to the introduction of a more comprehensive eye health examination in order to assess the patient's eye health, which provides a benefit to all individuals not only those requiring spectacles, and to address wider health aspects, such as diabetes, high cholesterol, thyroid disease, cancer and tumours, and high blood pressure or hypertension.

Until 2006 eye care service delivery was the same in Scotland and the rest of the UK; the introduction of this policy could be viewed as a natural experiment. We exploited this experimental element to identify the effects of the policy.

Our research project aimed to:

1. Assess how people responded to the free eye care policy and whether there was an increase in the uptake in eye examinations in Scotland
2. Explore possible socio-economic differences in the demand for eye care services
3. Investigate whether there were wider health benefits that could be achieved through an eye examination

Findings

Our analysis suggests that the policy did not succeed in reaching the people at the lower part of the income distribution. It is only individuals from the wealthier households that appeared to increase their eye examination uptake. Given that these individuals were more likely to have their eyes examined before the policy introduction, it seems that the universal free eye examination policy has increased inequality in preventive care use.

An unintended consequence of the policy was the widening of the socio-economic inequalities in the utilisation of eye care services in Scotland.

Although one could argue that the undesirable effect of increasing inequalities is enough to suggest that the free eye examination policy should be reconsidered, it is particularly difficult to fully assess the free eye care policy in Scotland. Any health improvements derived from this policy will not be fully felt for many years. The introduction of free NHS eye examinations effectively expanded the testing of sight to the provision of a more extensive eye health examination, which enabled optometrists to detect early signs of sight problems. As of 2010, there were almost 2 million people living with sight loss in the UK and, with an increasingly ageing population, that number is predicted to increase to almost 4 million by 2050. Loss of sight is expensive, with an estimated £22 billion costs associated with it in the UK. Although one can expect significant future cost savings, through the early treatment of disease and people avoiding loss of vision, these savings will only emerge over the longer term as a much larger section of Scottish society will potentially have their eyes examined on a regular basis.

Our findings also provide evidence of the wider impact that the eye care policy in Scotland may have had. Cardiovascular disease is the number one cause of death in the UK. In addition, it has important financial implications for the National Health Services. Eye examinations and hypertension are correlated, since people diagnosed with high blood pressure are advised to have their eyes tested for the presence of hypertensive retinopathy, and also eye examinations may lead to the prognosis of potential problems related to high blood pressure.

The evidence suggests that the free eye care reform in Scotland led to an increase in the detection of hypertension through a higher uptake of eye examinations.

The results highlight the wider health benefits and cost-savings that an eye examination can achieve through the early detection of hypertension. However, the issue of inequality remains. Our results suggest that the disparate uptake of eye examinations across income groups not only widens inequalities in eye health, but may also widen inequalities in other health conditions. In particular, it appears that the people in the upper part of the income distribution are more likely to have blood pressure examinations and consequently more likely to report more high blood pressure problems. This is the same group of people who are also more likely to respond positively to the eye care policy and have a higher uptake of eye examinations.

Discussion

Although there is evidence that there was an increase of the number of eye examinations and there are potentially wider health benefits and cost savings that can be achieved through the eye care reform in Scotland, the question of inequality remains. The policy did not succeed to be inclusive and to reach the segments of society that are more vulnerable and already have lower demand of health care services. This provides an example of an intervention aimed at the whole of the population that inadvertently increases inequality.

Our research project highlights the need to focus the policy agenda to the more vulnerable parts of our society in order to understand why people from lower income households do not avail themselves of free eye-examinations.

Attention should be focused on those at the lower end of the socio-economic ladder and explore what can be done to alleviate inequalities in demand for eye care services.

Research Team

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References

Dickey, H., Ikenwilo, D., Norwood, P., Watson, V. and Zangelidis, A. (2012) 'Utilisation of eye-care services: the effect of Scotland's free eye examination policy', *Health Policy*, 108(2-3), 286-293.

Dickey, H., Ikenwilo, D., Norwood, P., Watson, V. and Zangelidis, A. (2016) 'Doctor my eyes: a natural experiment on the demand for eye care services', *Social Science and Medicine*, 150, 117-127.

Dickey, H., Norwood, P., Watson, V. and Zangelidis, A. (2018) 'More Than Meets The Eye: Has the Eye Care Policy in Scotland Had Wider Health Benefits?'. Discussion Paper in Economics, no. 1, vol. 18. (https://pure.abdn.ac.uk/ws/files/115118021/DP_2018_1.pdf)