Statement from ISD (now Public Health & Intelligence) on Detect Cancer Early in response to committee questions

1. To what extent do you believe the Scottish Government’s Detect Cancer Early Programme and the approach by Integration Authorities and NHS Boards is preventative?

Public health prevention is aimed at three stages of a disease. The first is to try to stop it occurring in the first place. This is primary prevention. However, as it’s not always possible to prevent cancer, then curing it becomes the next aim. This is secondary prevention. Curing cancer depends on a number of things – including identifying it at an early stage, the existence of an effective treatment, and making that treatment available. For those whose cancer cannot be cured, a third stage – tertiary prevention – is about preventing or minimising the effects of the disease on a patient’s wellbeing. This includes managing side-effects of cancer and its treatment and optimizing patients’ abilities to lead normal lives, including returning to work. All three stages of cancer prevention are needed.

Detect Cancer Early (DCE) is about secondary prevention of cancer – the contribution of public awareness and clinical responsiveness that help to ensure patients with cancer are diagnosed at the earliest stage possible. Although it is not an objective of DCE, in the process of investigating suspected cancer, some conditions will be identified and treated that will stop cancer occurring in the first place.

NHS Boards are involved in a range of preventative activities for cancer that both support and extend beyond DCE. These include running smoking cessation and weight management programmes and health education.
2. Is the approach adequate or is more action needed and is the policy being delivered on the ground?

DCE constitutes part of a wider approach to cancer prevention that is described in the Scottish Government’s 2016 publication *Beating Cancer: Ambition and Action*.

It has been estimated that about 4 in 10 cancers might be prevented through behavioural changes. The prime risk factors for cancer are, in order of importance to the population: smoking; overweight and obesity; low fruit and vegetable diet; alcohol; occupational risks; sunlight and sunbed exposure; and vaccine-preventable infections. The story of primary prevention of cancer in Scotland is mixed. Certainly, smoking prevalence and exposure to smoke has fallen although over 1 in 5 adults in Scotland still smokes and this is higher than in England. Two thirds of adults in Scotland are overweight or obese and there is no sign that this is falling. New legislation to impose a minimum price per unit of alcohol is anticipated to reduce alcohol-related deaths but there is no safe minimum alcohol consumption level when it comes to cancer prevention.

But an implication of the message that 4 in 10 cancers could be prevented is that more than half are the result of factors that cannot be easily identified or changed. The biggest of these is increasing age. Early detection and effective treatment of cancers therefore remain important parts of the national strategy to improve cancer outcomes.

3. Are the services and Detect Cancer Early Programme being measured and evaluated in terms of cost and benefit?

There are several evaluations of DCE. ISD (the Information Service Division of the NHS in Scotland) reports on cancer stage at diagnosis since DCE was launched. In 2017, for example, ISD reported that there had been a 9.2% increase in the proportion of breast, bowel and lung cancers detected at the earliest stage since DCE began. ISD also reports on uptake of cancer screening programmes. The Detect Cancer Early Programme Board has commissioned several other evaluations, including academic research by the University of Edinburgh reported elsewhere to the Health and Sport Committee.

It is true that stage of cancer is one of the most important predictors of survival – the earlier, the better. The extent to which earlier detection will truly improve cancer outcomes is subject to debate. One issue is that patients who are diagnosed at a later stage may have more aggressive, faster-growing cancers that would have been difficult to have detected at an earlier stage. Their poorer outcomes may therefore be more of a reflection of the type of cancer they have rather than missed opportunities to have been diagnosed earlier. It is also well recognised that screening programmes introduce artefacts that make screening, for example, appear to improve survival even if it does not.

I am not aware of cost benefit analyses of DCE.

4. Is enough being done to address existing health inequalities in the early detection of cancer?

There are notable contrasts in the patterns of inequalities of cancer incidence, early cancer detection and cancer survival. For example, the risk of developing the most common cancer in women – breast cancer – is higher in women from more affluent areas. However, women from more affluent areas are more likely to participate in breast screening, have their breast cancer diagnosed at an earlier stage and to survive longer.
Some of the main inequalities in early detection and screening of cancer include sex (men tend to do worse than women), ethnic minorities (non-white Scottish people do worse), age (younger people do worse) and socio-economic deprivation. Health Boards actively work to reduce these inequalities by tailoring screening programmes, for example, to the needs of groups who are less likely to participate. The Scottish Government has supported this work through inequalities funding to help pilot projects.

Yours faithfully

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