NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

PUBLIC HEALTH GUIDANCE

SCOPE

1 Guidance title

Information, sun protection resources and physical changes to the environment to prevent skin cancer: NHS and local authorities.

1.1 Short title

Information, resources and environmental changes to prevent skin cancer.

2 Background

a) The National Institute for Health and Clinical Excellence ('NICE' or 'the Institute') has been asked by the Department of Health (DH) to develop guidance on public health interventions for the NHS and local authorities aimed at preventing skin cancer. Specifically, it has been asked to produce guidance on: the provision of information, physical changes to the environment and the supply of sun protection resources. This scope only covers the provision of information. **Primary prevention activities which focus on environmental changes, the supply of sun protection resources and multi-component interventions covering one or more of these activities is covered in a separate scope.**

b) NICE public health intervention guidance supports implementation of the preventive aspects of national service frameworks (NSFs) where a framework has been published. The statements in each NSF reflect the evidence that was used at the time the framework was prepared. The public health guidance published by the Institute after an NSF has been issued will have the effect of updating the framework. Specifically, in this case, the guidance will support the 'Cancer reform strategy' (DH 2007).

c) This guidance will support the following policy which specifically refers to skin cancer:

- 'The NHS cancer plan: a plan for investment, a plan for reform' (DH 2000).

It will also support the following policy documents:

- 'Choosing health – making healthy choices easier' (DH 2004)
- 'Operational plans 2008/09–2010/11' (DH 2008)
- 'PSA delivery agreement 18: promote better health and wellbeing for all' (Her Majesty's Treasury 2007)
- Tackling health inequalities: a programme for action' (DH 2003)
- 'The new performance framework for local authorities and local authority partnerships: single set of national indicators' (Department for Communities and Local Government 2007).

d) The guidance will complement NICE guidance on: improving outcomes for people with skin tumours including melanoma; photodynamic therapy for non-melanoma skin tumors; and referral guidelines for suspected cancer. For further details, see section 6.

e) This guidance will provide recommendations for good practice, based on the best available evidence of effectiveness, including cost effectiveness. It is aimed at professionals, commissioners and managers with public health as part of their remit working within the NHS and local authorities. Examples include: local authority planners, public health practitioners, pharmacists, GPs, school nurses, practice nurses and skin cancer specialists such as clinical nurse specialists (skin cancer), dermatologists and skin cancer surgeons. It will also be of interest to those working in the wider public, private, voluntary and community sectors, as well as members of the public.

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This guidance will be developed using the NICE public health intervention process.

3 The need for guidance

a) Exposure to ultraviolet (UV) radiation is the leading cause of skin cancer. This can occur naturally via sunlight and artificially through the use of sun lamps and tanning beds. The risk of skin cancer can be reduced by, for example, opting to stay in the shade, wearing protective clothing, avoiding the sun during the middle of the day and using high sun protection factor (SPF 30+) products.

b) There are two main types of skin cancer: non-melanoma and malignant melanoma:

- Non-melanoma is the most common and is usually the easiest to treat. There are two main sorts: basal cell and the more serious squamous cell (if left untreated, squamous cell can spread to other parts of the body).

- Malignant melanoma is the most serious and causes the majority of skin cancer deaths.

c) Skin cancer (non melanoma and malignant melanoma) is the most common cancer in the UK and is estimated to account for over a third of all cancers detected. More than 72,000 cases of non-melanoma skin cancer were registered in 2004 (Cancer Research UK 2008a), although estimates suggest that a much higher number are diagnosed each year (Office for National Statistics 2008). Research has shown that non-melanoma is rising in the young, especially within the 30–39 year age group (Bath-Hextall et al. 2007). Over 8900 cases of malignant melanoma are diagnosed each year (Cancer Research UK 2008a) – accounting for 3% of all cancer diagnoses. It causes1800 deaths a year (Office for National Statistics 2006). Since the 1970s, the incidence of malignant

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melanoma has more than tripled in the UK: among males it has increased from around 2.5 per 100,000 in 1975 to 11.0 in 2002; the rate among females has increased from 3.9 to 12.7 per 100,000 during the same period (Cancer Research UK 2006). Although morbidity rates are higher among females, more men die from malignant melanoma (Office for National Statistics 2006).

d) A recent survey highlighted that 44% of Britons were unable to recognise key signs of skin cancer (for example, a mole which is getting larger or which has an irregular border or colour). Only 34% check their moles at least once a month and 25% never check them. The majority of respondents (85%) thought that skin cancer (non melanoma and malignant melanoma) accounted for less than 10% of the incidence of all cancers in the UK (the actual figure is around 33%) (British Association of Dermatologists 2008). In a 2003 survey, 80% of those questioned mentioned using sunscreen to reduce the risk of skin cancer, but less than half (44%) specifically mentioned using a sunscreen with a 15+ SPF (Office for National Statistics 2003).

e) Several factors increase the risk of developing and dying of skin cancer, for example:

- Age and gender – the number of cases of malignant melanoma increases with age and is more common in women (Cancer Research UK 2006). Skin damage (sunburn) that occurs at a young age increases the risk of developing skin cancer later in life (Elwood and Jopson 1997).

- Ethnicity – although incidence rates are lower among those with darker skin, mortality rates are often higher because skin cancer is often diagnosed late.

- Individual risk – skin type, number of moles, hair and eye colour, history of lowered immunity or transplant and family or personal history of skin cancer all affect the risk of melanoma (Cancer Research UK 2006).

- Regional variation – London and the north have the lowest incidence rates, while the highest rates are in the south-west (Office for National Statistics 2005). Sunbed outlets are particularly prevalent in areas of socioeconomic deprivation.

- Social class – currently, malignant melanoma is positively associated with affluence (those from deprived areas show a 60-70% lower incidence rate compared with their more affluent peers) (Cancer Research UK 2006). However, people from more affluent areas are more likely to survive the condition (Cancer Research UK 2008b).

f) In 2005, skin cancer in England was estimated to cost over £190 million. The NHS alone spent approximately £70 million on the condition (Morris et al. 2005).

4 The guidance

Public health guidance will be developed according to NICE processes and methods. For details see section 5.

This document is the scope. It defines exactly what this guidance will (and will not) examine, and what the guidance developers will consider. The scope is based on a referral from the DH (see appendix A).

4.1 Populations

4.1.1 Groups that will be covered

Everyone and, where the evidence permits, specific population groups (such as people within a specific age range or from a particular ethnic group or who

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are at a higher than average risk of developing skin cancer). (For details see appendix B.)

4.1.2 Groups that will not be covered

None.

4.2 Activities

4.2.1 Activities that will be covered

a) The provision of information to prevent the first occurrence of skin cancer (primary prevention of non-melanoma and malignant melanoma) attributable to natural and artificial UV exposure. This includes information that improves knowledge and awareness of the causes of skin cancer, the risks of over-exposure to UV, ways to prevent skin cancer and where to get further information. It also includes information that can help to change behaviour to prevent the first occurrence of skin cancer. It will focus on the following types of intervention (universal and targeted).

- One-to-one or group-based verbal advice (with or without the use of information resources).
- Mass-media campaigns.
- Leaflets and other printed information, including posters, and teaching resources.
- New media: the Internet (including social networking sites), emedia and text messaging.

These interventions could be delivered in various settings (such as the NHS, schools and workplaces) or by a range of people (such as general practitioners, practice nurses, pharmacists, early childhood services and teachers).

b) Primary prevention interventions focused on the following:

- Physical changes to the built or natural environment. This could include the provision of shelters and other areas of shade in public spaces or school grounds.
- Provision of sun protection resources such as sunscreen or protective clothing for outdoor workers.

c) Multi-component interventions which combine one or more of the above and which may also include the provision of information.

Please note, a scope for the interventions described in b) and c) above has been produced separately and is available at www.nice.org.uk/guidance/PHG/Wave18/54(also see appendix A).

It is acknowledged that a range of other measures, including policy and legislation are important. These aspects of prevention may be the subject of future NICE guidance.

4.2.2 Activities/interventions that will not be covered

a) Secondary prevention (activities that aim to prevent a re-occurrence of skin cancer).

b) Policy, legislative or fiscal changes. For example, raising the minimum age of sunbed use to 18 years, removing unsupervised and coin-operated sunbed facilities or reducing VAT on sunscreen products.

c) Local, regional or national skin cancer screening programmes which solely aim to detect the occurrence of skin cancer or activities to assess its incidence among specific groups.

d) Assessment of the accuracy of effective information resources.

e) Clinical diagnosis, treatment and management of skin cancer.

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4.3 Key questions and outcomes

Below are the overarching questions related to information provision that will be addressed, along with some of the outcomes that will be considered as evidence of effectiveness and cost effectiveness. The overarching questions relating to environmental changes, sun protection resources and multi-component interventions are presented in a separate scope: www.nice.org.uk/guidance/PHG/Wave18/54.

Question: What are the most effective and cost-effective ways of providing information to change people's knowledge, awareness and behaviour and so prevent the first occurrence of skin cancer attributable to UV exposure?

Question: What content do effective and cost-effective primary prevention messages contain (see appendix B)? What is the most effective and cost-effective content?

Question: What factors help to convey information to prevent the first occurrence of skin cancer attributable to UV exposure? What factors hinder the communication of primary prevention messages?

Expected outcome/s:

These may include:

- Reduction in the incidence of morbidity and mortality from non-melanoma and malignant melanoma skin cancer attributable to natural and artificial UV exposure. This may be measured in terms of a reduction in the incidence of sunburn or cumulative UV exposure.
- Change in behaviours that can lead to a reduction in the incidence of over-exposure to natural and artificial UV.
- Increase in knowledge and awareness that can lead to a reduction in the incidence of over-exposure to natural and artificial UV.
- Increase in knowledge and awareness of the following:

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  - causes of non-melanoma and malignant melanoma skin cancer attributable to natural and artificial UV exposure (such as sunburn)
  - risks associated with over-exposure to natural and artificial UV
  - ways to prevent non-melanoma and malignant melanoma skin cancer attributable to natural and artificial UV exposure. (For example, by wearing a hat in the sun, keeping in the shade, avoiding sunlight around the middle of the day, wearing protective clothing and using a 30+ protection sunscreen)
  - where to get further advice and information.

- Views and experiences of those planning and delivering prevention messages on the:
  - barriers and facilitators to practice (such as content of information and the way it is conveyed) and how to overcome the barriers. (For example, by providing clear messages on issues such as vitamin D.)

- The public's views and experiences of:
  - what prevents them from acting on prevention information (such as the content of information and the way it is conveyed) – and how to overcome those barriers.

Current information provision and/or do nothing will be the comparator used to assess effectiveness and cost effectiveness. Where data permits, the effectiveness and cost effectiveness of different ways of conveying information (such as via mass media, posters or oral communication) will be compared with each other.

4.4 Status of this document

This is the final scope, incorporating comments from a 4-week consultation which included a stakeholder meeting on17 July 2008.

5 Further information

The public health guidance development process and methods are described in 'Methods for development of NICE public health guidance' (NICE 2006) available at www.nice.org.uk/phmethods and 'The public health guidance development process: An overview for stakeholders, including public health practitioners, policy makers and the public' (NICE 2006) available at www.nice.org.uk/phprocess

6 Related NICE guidance

Published

Improving outcomes for people with skin tumours including melanoma. NICE cancer service guidance (2006). Available from: www.nice.org.uk/guidance/index.jsp?action=byID&o=10901

Photodynamic therapy for non-melanoma skin tumours (including premalignant and primary non-metastatic skin lesions). NICE interventional procedure 155 (2006). Available from: www.nice.org.uk/IPG155

Referral guidelines for suspected cancer. NICE clinical guideline 27 (2005). Available from: www.nice.org.uk/guidance/CG027

Under development

Diagnosis and management of metastatic malignant disease of unknown primary origin. NICE clinical guideline (due May 2010).

Temozolomide for the treatment of advanced an metastatic melanoma. NICE technology appraisal (due date to be confirmed).

Appendix A Referral from the Department of Health

The Department of Health asked the Institute:

'To produce public health intervention guidance for the NHS and local authorities on the prevention of skin cancer in the general public with specific reference to:

- provision of information
- physical changes to the environment
- supply of sun protection resources.'

This scope focuses on the provision of information only. Physical changes to the environment and the supply of sun protection resources will be covered in a separate scope (see www.nice.org.uk/guidance/PHG/Wave18/54). One piece of guidance will be produced covering both scopes.

Appendix B Potential considerations

Depending on the state of the evidence, it is anticipated that the Public Health Interventions Advisory Committee (PHIAC) will consider the following issues in developing the guidance:

- The target audience, for example, the health professionals or practitioners responsible for delivery, actions taken.
- Whether the intervention is based on an underlying theory or conceptual model.
- Whether the intervention targets specific individuals (for example, parents and young people) or targets the general population.
- Whether the intervention is effective and cost effective.
- Critical elements, for example, whether effectiveness and cost effectiveness varies according to:
    - the diversity of the population (for example, in terms of the person's age, gender, ethnicity or individual risk factors such as history of lowered immunity or transplant, skin type or hair and eye colour, literacy levels or any physical and/or mental impairments) and whether the intervention is transferable to other population groups
    - the status, knowledge and influence of the person delivering the intervention
    - the way in which the intervention is delivered (for example, verbal information and advice, or via a leaflet)
    - the relative effectiveness and cost effectiveness of the content of different interventions
    - the frequency, intensity and duration of the intervention
    - where and when the intervention takes place (for example, at a school sports event or when people are on holiday abroad);

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what season the message is delivered in and whether it is transferable to other settings (such as the NHS) or seasons.

- Any trade-offs between equity and efficiency: whether or not interventions have a particular effect on skin cancer prevention rates or the uptake of prevention information among specific population groups.
- Any environmental, social and cultural factors that prevent – or support – effective implementation or uptake of the information (for example, perceptions of the risks and the benefits of UV exposure, including knowledge that exposure to the sun is a source of vitamin D).
- Any adverse or unintended effects of the intervention.
- Availability and accessibility of the intervention for different population groups.

Appendix C References

Bath-Hextall F, Leonardi-Bee J, Smith C et al. (2007) Trends in incidence of skin basal cell carcinoma. Additional evidence from a UK primary care database study. International Journal of Cancer 121: 2105–2108.

British Association of Dermatologists (2008) Brits unaware of skin cancer risk, new survey reveals [online]. Available from: www.bad.org.uk/public/cancer/sun_awareness_press_releases.asp#survey [accessed 10 June 2008].

Cancer Research UK (2006) CancerStats malignant melanoma – UK. London: Cancer Research UK.

Cancer Research UK (2008a) CancerStats incidence – UK. London: Cancer Research UK.

Cancer Research UK (2008b) CancerStats key facts skin cancer. London: Cancer Research UK.

Department for Communities and Local Government (2007) The new performance framework for local authorities and local authority partnerships: single set of national indicators. London: Department for Communities and Local Government.

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