

Topic Selection Programme

Briefing Note

Briefing note title: Diagnosis and Management of Non-melanoma skin cancer.
(NMSC)

Potential output: Clinical Guideline

Consideration panel: [Delete as appropriate: Acute and Chronic Conditions, Cancer, Mental Health; Public Health; Vascular Conditions, Women's and Children's Health] (NICE to complete)

Date of panel meeting: (NICE to complete)

Ref: (NICE to complete)

Potential conflicts of interest: (Please complete if necessary)

1. Background

Non-melanoma skin cancer (NMSC) represents a huge burden of disease in the UK and has a higher incidence than all other malignancies put together. The vast majority of such tumours (including pre-malignant and primary non-metastatic skin lesions) have a low risk of metastatic disease, however they can produce high degrees of morbidity.

After discussion with NICE, in this document non-melanoma skin cancer, includes the following conditions:

- Pre-cancerous conditions: Actinic Keratoses and Bowen's Disease
- Basal cell Carcinoma (BCC) and Squamous Cell Carcinoma (SCC)
- Rarer non-melanoma skin cancers include porocarcinoma, malignant appendageal tumours and suprafascial sarcomata (principally leiomyosarcoma and dermatofibroma sarcoma protuberans)
- Merkel cell Carcinoma- a neuroendocrine tumour that is increasing in incidence and has a worse prognosis than melanoma.

Subfascial sarcoma and cutaneous T and B cell lymphoma and related lymphoid conditions are outwith the scope of this document.

Clinical need for guidance

A. The importance of developing this guideline is to highlight important areas such as:

- NMSC represents the most common group of cancers in the UK.
- The incidence of these tumours is projected to continue to increase until 2040
- Ensuring equity to access of treatments and clinical nurse specialists across England and Wales.
- Ensuring that the delivery of care is provided by a multi-professional team.
- The importance of assessment of new diagnostic tools for example teledermatology.
- Skin lesion recognition in primary care must be enhanced through education at both an undergraduate and postgraduate level to be effective.
- Ensuring that patients are given informed choice of surgical and non-surgical forms of treatment.

B. Existing guidelines: Patient pathways and the community delivery of care are described in 'Measures for Skin Cancer', however the community component of this document was withdrawn in 2010. To ensure equity of care and choice it is important that holistic and

integrated models of care are developed to facilitate appropriate treatment for people with skin cancer.

Although guidelines exist for the treatment of Actinic Keratoses, Bowens Disease, SCC and BCC, there is no one multi-professional national guideline which bring together the management of these conditions and the other rarer NMSC.

C. Commissioning implications: To ensure equity of care and appropriate access to treatments, it is important that a robust guideline for the management and delivery of care for NMSC is available to commissioners, particularly in view of the present and future projected burden of disease.

It is important that these guidelines should be cross referenced with delivery of other forms of dermatology care, particularly pigmented lesions and melanoma care, but also with non neoplastic dermatology, as there are significant overlaps both clinically and in commissioning.

There is a real need to ensure accurate diagnosis and management of these lesions in both primary and secondary care. Delay in diagnosis can lead to an increase in the size of lesions, which may decrease the response to treatment, making more complex procedures necessary. This has major implications for patient safety. Optimising early diagnosis and management is essential.

A key issue in the care of these tumours is to ensure equity of care throughout the UK. With new commissioning arrangements for dermatology services and GP consortia all patients should expect the same level of care and in the appropriate treatment setting regardless of postcode or provider of care.

It is important to consider actinic keratoses and Bowen's disease, as they have an impact on the diagnosis and management of non-melanoma skin cancer. Both represent keratinocyte dysplasia which may progress to SCC in the skin (as CIN may be the precursor of cervical carcinoma).

There are year on year increases in incidence of BCC and SCC. The numbers of immunosuppressed patients, particularly organ transplant recipients, is increasing and as a consequence rates of SCC are increasing. This group is particularly at risk of developing metastatic disease.

The management of skin cancer should be integrated into a holistic model of skin care. In view of the projected increases in incidence of both non-melanoma and melanoma skin cancers over at least the next decade, integrated models of care should be developed which incorporate skin cancer prevention. In the past, there has been too little emphasis on non-melanoma skin cancer prevention.

There are variations in skin cancer incidence in the UK largely due to differences in ethnicity and age affecting susceptibility to skin cancer. These variations along with geographical influences should be taken into account when commissioning skin and skin cancer services.

Key questions to consider:

1.1 Key questions

- Does the guideline relate to a condition that is associated with a significant burden of avoidable morbidity or mortality?
A. Yes with the present and expected levels of skin cancer as described above.

- Does the clinical guideline link to a health-related government priority?
A. Improving Outcomes: A Strategy for Cancer January 2011

- Will a clinical guideline impact on morbidity and mortality?
A. Yes through early recognition and appropriate management

- Will a clinical guideline reduce inappropriate variations in healthcare practices or inequalities in health?
A. Inequalities have been described relating to access to appropriate modes of treatment for NMSC for instance radiotherapy and Mohs micrographic surgery. Additionally the guidance will form the platform to ensure equity from diagnosis to definitive treatment.

- What are the resource implications of the clinical guideline?
A. Training is extremely important in the management of NMSC: a large New Zealand study has demonstrated very high rates of incomplete excision of NMSC carried out by GPs and GPwSIs compared with Dermatologists (Salmon et al 2010). To date guidance has not taken into account demographic differences in the UK relating to ethnicity, age and incidence of skin cancer, which critically affect the burden of NMSC for services.

Robust integrated care pathways should exist for NMSC across primary and secondary care and commissioners should take into account the increased potential morbidity and

mortality of delayed primary diagnosis and suboptimal treatment. There is a lack of evidence and research relating to incidence, which stems from poor registration of these tumours in the past.

- Is there any urgency in undertaking a clinical guideline?
A. *Yes, this is the commonest cancer in the UK and is increasing in frequency. This will be a major concern in the new commissioning arrangements. A new guideline will ensure equity for patients across England.*

- Would a clinical guideline still be relevant at the expected date of publication?
A. Yes

1.2 Clinical questions

Organisation of services

- Do people with NMSC have better outcomes when seen by MDT's than outside the pathway?
- Does teledermatology in NMSC have a role in enhancing the outcomes, improve early diagnosis increase efficiency of management or shorten pathways?
- Does an integrated skin cancer care system involving primary, intermediate, community and secondary care improve outcomes?
- Is commissioning a community skin cancer service under AQP (previously AWP) more beneficial to patients?
- Can an independent provider under AQP provide optimal care for the management of NMSCs or does this lengthen the patients' pathway?
- How will an independent provider under AQP integrate into the required local MDT care pathways? Who will monitor and audit their pathology results for excised BCCs?
- Is access equitable for Micrographic Mohs' surgery, radiotherapy and support services ?
- Is there equitable access to Skin Cancer Clinical Nurse Specialists?
- Are current arrangements for national registration of NMSC and NCIN requirements optimal?
- Does the service comply with Clinical Governance standards (defined by DH and National Cancer Measures)?.

Diagnosis

- Is the undergraduate and postgraduate GP training fit for purpose for the diagnosis and management of NMSC particularly in view of the projected increased incidence ?

- Are all practitioners aware of the risk factors and co-morbidities of high risk factors, patients and lesions?
- Are arrangements for histopathology diagnostics appropriate and equitable?
 - Are all skin lesions submitted / managed locally?
 - Are specimens being appropriately biopsied?
 - Does a single pathology lab improve diagnosis?
- Are all practitioners adhering to the IOG mandate? Are the skin IOG requirements fully appropriate for skin tumours?
- Are practitioners working with multiple laboratories in a co-ordinated and safe manner?
 - Are all laboratories undertaking appropriate training and updates. Do they have good tracking within the system? The quality of the diagnosis has a huge impact on is the timeliness of treatment and the collection of data.
 - Are current arrangements for pathological diagnosis and registration of skin cancers appropriate?
 - Are arrangements for histopathology diagnostics equitable?
 - Are pathology services provided by members of the local/specialist MDT
- Are there validated tools to improve diagnostics and enhance outcome?
- Is there a role for teledermatology or teledermoscopy?
 - Are medical photography services available for monitoring of high risk patients?

Factors influencing Management

- Are high risk lesions/patients identified appropriately?
 - Are outcomes improved by histological clearance of the tumour?
 - Does appropriate follow up and surveillance (according to tumour type) improve outcome? Yes, it does improve outcome for the immunosuppressed and those with a genetic predisposition.
- Is management based on clinical pathway confirmation
 - Is management based on confirmed diagnosis?
 - Are outcomes, morbidity and mortality recurrence rates improved?

- Monitoring for the future - are appropriate decisions made?
- How are management decisions influenced by patient outcomes?
- How the patient is monitored to improve the experience?

- Are management decisions for appropriate lesions / patients made within context of MDT / MDT policy?
 - Are outcomes:
 - morbidity/mortality improved
 - Margin clearance / recurring

- Does follow up in secondary care improve outcomes?
 - Particularly for immunosuppressed patients and high risk lesions.
 - General follow up and follow up for high risk tumours and patients
 - Do patient education, care in the community, nurse led follow up, education for recurrence, and, support groups influence follow up?

- Patient satisfaction / experience surveys
 - Do patient perceptions of outcome influence future management decisions?
- Are patients offered / given informed choices for treatment? Are non surgical techniques used appropriately?
 - Are there adequate support frameworks in place?

- What is the evidence for the use of Mohs' micrographic surgery? For NMSC? Is there appropriate provision in the UK?
 - BCC / SCC / I skin Sarcoma / Microcystic adnexal carcinoma AC
 - What is the appropriate management of Merkel Cell Carcinoma (MCC) and other rarer NMSC?

- Are there situations when non excisional treatments for SCCs are appropriate; do they give satisfactory outcomes (for instance curettage and cautery, liquid nitrogen and radiotherapy)>
 - Is Radiotherapy used appropriately in NMSC?

Systemic treatment

- What is the value of chemotherapy prevention in high risk patients e.g. Merkel, DFSP, metastatic SCC, chemo prevention
- Are the outcomes of systemic Chemotherapy for NMSC beneficial?
- Is there a role for adjuvant Radiotherapy and chemotherapy in NMSC? Particularly in MCC, SCC, DFSP

- Is there a role for VIT D supplementation?
 - In the Prevention of Skin Cancer
 - In patients who are Sun avoiding

1.3 Source of suggestion

(NICE to complete)

1.4 Target group for guideline

All those involved in commissioning and delivering care for patients with NMSC (diagnosing, treating and managing).

1.5 Purposes of guideline

The purpose is to ensure equity of care and safety for patients with NMSC. Delivery of skin cancer care will be one of the principle areas of interest for new commissioning clusters; therefore it is important that a robust national guideline exists for the commissioning of these conditions.

2. Key points

Safety and equity of access to care for patients is essential. This will be achieved by ensuring that practitioners follow these guidelines which will form the basis for audit and a subsequent tool for revalidation.

The five domains for Health Care outcomes will be addressed through these guidelines and be informed by PROMs and PREMs.

Registration of non melanoma skin cancers is very poor across England. This is largely due to the nature of the cancer and the numbers involved. This is a key element to address so that services can be configured appropriately in the future.

3. General background

NMSC is the most commonly diagnosed cancer in white populations worldwide, with BCC and SCC occurring at a ratio of about 4:1.

Reliable statistics on the incidence of NMSC are difficult to obtain, but it is estimated that around 100,000 people are diagnosed with it each year in the UK (Holme 2000)

Estimates suggest that the incidence of NMSC increased by an average of 3 to 8% per year in Europe, the US, Canada and Australia from the 1960s to the 1990s (Diepgen, 2002)

The age shift in the population has been accompanied by an increase in the total number of skin cancers, and a continued rise in tumour incidence in the U.K. has been predicted up to the year 2040 (Diffey 2005).

In situ dysplasia and neoplasia

Actinic Keratoses

Actinic Keratoses (AK) are extremely common in the UK population are characterised by dysplastic change in the epidermis. In the USA, AKs are referred to as "SCC in situ".

Although the risk of malignant transformation for any given AK is very low, the probability of an individual with AKs presenting subsequently with skin cancer is higher than the population at large (Foote 2001)

Mathematical models predict that for an individual with an average of 7.7 AKs, the probability of at least one transforming within a 10-year period is approximately 10%.(Dodson 1991)

Therefore, there is a real need to ensure the accurate diagnosis and management of these lesions whether it is in primary or secondary care.

Bowen's Disease (insitu squamous cell carcinoma)

Most studies suggest a risk of invasive carcinoma of about 3–5% for 'ordinary' BD (Jaeger 1999) and perhaps 10% for penile in situ SCC (Gerber 1994). Perianal BD also has higher risk of invasion and recurrence (Marchesa 1997) and an association with cervical and vulval dysplasia (Sarmiento 1997).

Squamous Cell Carcinoma (SCC)

SCC is the second most common skin cancer and, in many countries including the UK, its incidence is rising. (Marks 1996).(Holme 2000) (Gray 1997). Although cancer registration for SCC is better than BCC there is national under-reporting of the tumour.

Its occurrence is strongly related to chronic ultra violet exposure and is common in people with sun-damaged skin, fair skin, albinism and xeroderma pigmentosum. It may develop as a result of previous exposure to ultraviolet or ionising radiation, or arsenic, within chronic wounds, scars, burns, ulcers or sinus tracts and from pre-existing lesions such as Bowen's disease (intraepidermal SCC) (Motley 2008).

Individuals with impaired immune function, for example those receiving immunosuppressive drugs following allogeneic organ transplantation (Moloney 2006) or for inflammatory disease, and those with lymphoma or leukaemia (Mehran 2005) are at increased risk of this tumour; with increasingly sophisticated immunosuppressive regimens the longevity of these patients has improved but as consequence the rates of NMSC and particularly SCC has increased. (Moloney 2006).

The risk of SCC with 'biologic' therapies has yet to be quantified, although reports identify cases of rapid-onset or reactivation of SCC in patients with risk factors or a past history of the disease.

BCC rarely metastasises, while SCC can spread to other parts of the body. Particularly in the immunosuppressed population

Treatment for NMSC can involve disfiguring surgery and nearly half of patients develop another NMSC within five years (Nguyen 2002).

Basal Cell Carcinoma

BCC is the most common cancer in Europe, Australia and the U.S.A. (Miller DL 1994) and is showing a worldwide increase in incidence. Inconsistent data collection unfortunately means that accurate figures for the incidence of BCC in the U.K. are difficult to obtain (Goodwin 2004)

Following development of a BCC, patients are at significantly increased risk of developing subsequent BCCs at other sites (Telfer 2008).

3. Clinical need and burden of disease

Key questions to consider:

- Does the proposed guidance relate to a significant burden of disease, disability, injury or early death in the population as a whole or in specific population sub-groups?

A: Yes, the majority of skin cancers (97%) are either basal cell carcinomas (BCCs) or squamous cell carcinomas (SCCs). BCCs are the commonest malignant growth in humans and occur most commonly on sunlight exposed sites. BCCs are locally malignant and invasive and can cause extensive local tissue destruction if left to progress. As a general rule, SCC is more aggressive than BCC, being more likely to enlarge rapidly and with the potential to metastasise (spread around the body).

Whilst over 76,000 new non-melanoma skin cancers (NMSC) were registered in the UK in 2005 (Cancer Research UK 2009b), this is likely to be an underestimate of the true incidence of the problem, as registration of BCCs is not compulsory. A study that reported on trends in NMSC in South Wales between 1988 and 1998 (Holme et al 2000) provides useful information on the likely UK incidence. The following important points can be made from this study:

- The number of patients presenting with NMSC (i.e. the incidence) increased from 174 to 265 per 100,000 population per annum between 1988 and 1998.
- There was a 66% increase in incidence of BCC and a 16% increase in SCC over the ten year period.
- The overall ratio of incidence of BCC:SCC was 5:1, although this showed a variation with age, the ratio being 9:1 in 50-69 year olds and 2:1 in the over 85s.
- Incidence was particularly high in the elderly, with 1,364 per 100,000 population per annum in the over 85s and higher rates in men than women in this age group.
- The data described number of patients, not number of lesions, and excluded recurrent tumours, so the figures underestimate the clinical activity required to manage NMSC.
- Data capture was incomplete, as some NMSC may have been treated using cryotherapy in general practice settings.
- Extrapolation based on the 1998 data suggested the following number of new patients presenting with NMSC each year at a national level: 6,000 in Wales, 9,000 in Scotland and 100,000 in England.

Trends in incidence of BCC from a UK primary care database population cohort study (Bath-Hextall et al 2007a) showed an incidence of 153.9 per 100,000 person years

with a 3% year on year increase between 1996 and 2003. These data suggest 53,000 new cases of BCC in the UK each year.

Mirroring the apparent increases in the UK, there is a continuing rise in the incidence of BCC worldwide, although the evidence is less clear cut for SCC, the incidence of which may have plateaued (Harris et al 2001).

- Is any proposed guidance likely to impact on the current burden of disease and reduce inequalities in health?
 - A. Yes. Reduce burden of disease by decreasing incidence due to public health advice.
- Does the proposed guidance relate to a condition that is associated with a significant burden of avoidable morbidity or mortality?
 - A: Yes, BCCs very rarely metastasise but SCCs do, and mortality from NMSC is usually as a result of metastatic spread from SCC. Age, skin type and amount of exposure to ultraviolet radiation are the key risk factors for NMSC. There are a number of other clinical situations that lead to patients having a predisposition to developing NMSC, the most important of these being as follows:
 - People with so-called precursor lesions such as Bowen's disease and actinic keratoses - probably about 4-6% of Bowen's disease transforms to SCC (Eedy 2000) and for actinic keratoses transformation rates to SCC of 0.025 to 20% are reported (Alam and Ratner 2001).
 - Patients with a past history of NMSC - the risk of developing a second SCC within three years of having one is about 18%, and the risk of developing a second BCC within three years of having a BCC (or SCC) is about 44% (Marcil and Stern 2000).
 - Patients with long-term immunosuppression or altered immunity particularly following renal transplant, where a 500-fold increased risk of NMSC has been reported (Hartevelt et al 1990).
 - Certain rare inherited skin conditions - including xeroderma pigmentosum, albinism, and basal cell naevus syndrome (Gorlin's syndrome).
 - People treated using psoralen and ultraviolet A (PUVA)
- Will the proposed guidance reduce inappropriate practice or variations in healthcare practices or inequalities in health?
- Is any proposed guidance likely to impact on variation in access to clinical interventions or treatment (between geographical areas or social groups)?

4.1 Prevalence

Unfortunately, because of variation between registries in data capture, recording, and processing for skin-cancer registration, accurate figures for incidence of non-melanoma skin cancer in the UK are difficult to obtain. More than 76 000 new cases of non-melanoma skin cancer were registered in the UK in 2005, but the actual incidence is estimated to be at least 100 000 cases per year.⁸ Results of a Welsh study showed that the crude incidence of non-melanoma skin cancer increased from 173.5 to 265.4 per 100 000 population yearly between 1988 and 1998. In Northern Ireland, in the 10 years after 1993, incidence of melanoma and non-melanoma skin cancer increased by 62% in the overall number of skin-cancer samples processed by local pathology laboratories. A 20% increase in total number of patients was also noted. Rising incidence of non-melanoma skin cancer might partly be due to increased patient and physician awareness of the disease, in addition to improved coding.

The age shift in the population has resulted in an overall increase in total number of skin cancers, since incidence of non-melanoma skin cancer increases with age. Indeed, 80% of cases occur in people aged 60 years and older. By 2030, the number of cases presenting to dermatologists could increase by an estimated 50%. Incidence is higher in men than in women.

4.2 Burden of avoidable disease

Very little validated work has been done on this in the context of non melanoma skin cancer. However, there is no doubt that with greater undergraduate and postgraduate education in skin diagnosis there will be a significant reduction in referrals to secondary care. Therefore producing a much more efficient system for the management for patients with skin cancer.

The only rigorous study on the burden of avoidable disease was carried out in Australian cohort of 1300 over a 5year period which analysed the cost of preventing development of actinic keratoses and basal cell carcinoma through sunblock use and reinforcement through telephone. A significant saving was demonstrated by using this tactic compared to the cost of treating these lesions (Gordon et al 2009) equating to a saving of \$AUS108/person.

4.3 Existing comparators and treatments

(Please complete)

4.4 Variation in practice

There is a significant variation in practice across the UK depending on access to specific treatments such as radiotherapy and Mohs' surgery. In addition, due to variations in access to dermatologists a significant number of NMSCs have been treated in the community outside of the prescribed MDT structure and supervision as laid down in The NCC Measures Document and DH GPwSI guidelines. Techniques such as teledermatology provided by Any Willing Provider (AWP or AQP) are starting to be commissioned by PCTs without reference to the local MDTs.

5. Policy importance

Key question to consider:

- Does the proposed guideline relate to a health-related government priority?

Yes this relates to the 2011 department of health initiative: "Improving Outcomes: a strategy for cancer" January 2011.

6. Timeliness

Key questions to consider:

- Is there urgency in producing guidance?
- Would the guidance still be relevant and timely at the expected date of publication?

A: With the onset of the new commissioning arrangements in England and Wales this guidance will be extremely timely and will be relevant at the time of publication.

7. Relevant existing and developing guidance

Key questions to consider:

- Is there other relevant evidence that should be considered for the further development of this topic (published or unpublished)?
- What is the nature of this evidence (e.g. quality and consistency)?

A: Please see the list of published material below:

British Association of Dermatologists. Guidelines for the management of basal cell carcinoma. Br J Dermatol 2008; 159: 35-48.

<http://www.bad.org.uk/Portals/Bad/Guidelines/Clinical%20Guidelines/BCC%20Guidelines%20BJDJul08.pdf>

NICE Improving outcomes for people with skin tumours including melanoma. London: National Institute for Health and Clinical Excellence, 2006.
http://www.nice.org.uk/nicemedia/pdf/CSG_Skin_Manual.pdf.

Guidelines for the management of actinic keratoses D de Berker, JM McGregor and BR Hughes, BJD, Vol. 156, No. 2, February 2007 (p222-230)
http://www.bad.org.uk/Portals/_Bad/Guidelines/Clinical%20Guidelines/Actinic%20Keratoses.pdf

Royal College of Pathologists. Minimum Dataset for the Histopathological Reporting of Common Skin Cancers. February 2002

Guidelines for management of Bowen's disease: update 2006 NH Cox, DJ Eedy, CA Morton, BJD, Vol. 151, No. 1, January 2007 (p11-21)
http://www.bad.org.uk/Portals/_Bad/Guidelines/Clinical%20Guidelines/Bowens%20Disease%20update%20January%202007.pdf.

Multi-professional guidelines for the management of the patient with primary cutaneous squamous cell carcinoma 2009 RJ Motley, PW Preston, CM Lawrence - *update of the original guideline which appeared in BJD, Vol. 146, No. 1, January 2002 (p18-25)*
http://www.bad.org.uk/Portals/_Bad/Guidelines/Clinical%20Guidelines/SCC%20Guidelines%20Final%20Aug%202009.pdf

'NICE Improving outcomes for people with skin tumours including melanoma (update). The management of low risk Basal cell Carcinomas in the community.2010.'

Department of Health document on the guidelines for guidance and competences for the provision of services using GPs with Special Interests (Gypsies) 2011.

8. Related NICE guidance

(NICE to complete)

9. Related guidance from other agencies

(Please complete if possible)

[Organisation] ([year]). [Full title]

The Australian Cancer Network 2002

Clinical Practice Guidelines: Non-melanoma skin cancer: Guidelines for treatment and management in Australia <http://www.nhmrc.gov.au/node/1590>

European Dermatology Forum Guideline Committee.
Guidelines: the management of basal cell carcinoma.
Eur J Dermatol 2006; 16: 467-475. PubMed

10. Potential impact – speculative

See above

10.1 Equity issues

Key questions to consider:

- Addressed above

10.1.1 Equality impact assessment by NICE topic selection team

(NICE to complete)

10.2 Likely resource impact

(Please complete if possible)

Key questions to consider:

- Does the proposed guideline relate to one or more interventions or practices, which might impact significantly on NHS or other societal resources (financial and other)?
- Does the proposed guideline address an area of action where better evidence of cost-effectiveness would be expected to lead to substantive cost-efficiencies in the delivery of quality programmes or interventions?
- Does the proposed guideline relate to one or more interventions from which the NHS could disinvest without detriment to cost-effective patients care, thus freeing up resources for use elsewhere in the NHS?

A: If commissioned this guidance will enable a significant change in practice ensuring that correct diagnosis is made at an early stage in the patient journey, therefore potentially decreasing the complexity of treatment. As outlined above the cost effectiveness of individual treatments for non melanoma skin cancer is poorly described in the UK literature. With enhanced registration of non melanoma skin cancer and commissioning of cost economic analyses it is likely that planning for integrated models of skin care will be optimised.

Effective public health campaigns for skin cancer would have a great societal benefit and with time may have an impact on the incidence of these tumours. Indeed development of national governmental sponsored campaigns will also have a positive effect on Melanoma prevention in addition to Non melanoma skin cancer.

10.2.1 Likely resource impact: comments from NICE costing team

(Estimated cost and cost impact) (NICE to complete)

10.3 Likely impact on service delivery

- Is the proposed guideline likely to address the effectiveness of particular models for service delivery?
- Is the proposed guideline likely to address the requirement for referral to or from more specialist services?
- Is the proposed guideline likely to address the optimum timing of specific interventions?
- Is the proposed guideline likely to address access to services?
- Is the proposed guideline likely to address the competencies required to deliver interventions/services?

A: It is important that standalone guidance for the management of non melanoma skin cancer is developed to ensure that integrated service models are developed which take into account to 3 key policy documents:

- NICE Guidance on cancer services: Improving outcomes for people with skin tumours including melanoma.2006' ;
- 'NICE Improving outcomes for people with skin tumours including melanoma (update). The management of low risk Basal cell Carcinomas in the community 2010.'
- Department of Health document on the guidelines for guidance and competences for the provision of services using GPs with Special Interests (GPwSIs) 2011.

A new guideline will optimise service delivery for patients with skin cancers ensuring that there is seamless delivery of care for patients whilst ensuring the competencies of all participants in the patient pathway.

Referral to the appropriate part of an integrated community/secondary care system will be addressed by this guideline by ensuring safe development of referral management systems including teledermatology and teledermoscopy. It will also facilitate involvement of the appropriate members of the Multidisciplinary Team for individual patients.

It will also for the basis for commissioners when deciding if "Any Willing Provider" is compliant to national agreed guidance and therefore fit for service.

11. Comments from interested parties

(NICE to complete)

11.1 Comments from patient groups

(NICE to complete)

11.2 Other comments

(NICE to complete)

12. Proposed remit of guideline

(NICE to complete)

13. Technical addendum: key sources consulted

1. Surgical excision of skin cancer: the importance of training P. Salmon¹, N. Mortimer¹, M. Rademaker^{2,3}, L. Adams¹, A. Stanway¹, S. Hill² *BJD* Volume 162, Issue 1, pages 117–122, January 2010
2. Gordon LG, Scuffham PA, van der Pols JC, McBride P, Williams GM, Green AC (2009) Regular sunscreen use is a cost-effective approach to skin cancer prevention in subtropical settings. *J Invest Dermatol* 129:2766–2771
3. British Association of Dermatologists. Guidelines for the management of basal cell carcinoma. *Br J Dermatol* 2008; 159: 35-48.
<http://www.bad.org.uk/Portals/Bad/Guidelines/Clinical%20Guidelines/BCC%20Guidelines%20BJDJul08.pdf>
4. Guidelines for the management of actinic keratoses D de Berker, JM McGregor and BR Hughes, *BJD*, Vol. 156, No. 2, February 2007 (p222-230)
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5. Bath-Hextall F, Leonardi-Bee J, Smith C, Meal A, Hubbard R. Trends in incidence of skin basal cell carcinoma. Additional evidence from a UK primary care database study. *International Journal of Cancer*. 2007;121(9):2105–2108.
6. Moloney FJ, Comber H, O’Lorcain P *et al*. A population-based study of skin cancer incidence and prevalence in renal transplant recipients. *Br J Dermatol* 2006; **154**: 498-504.
7. National Collaborating Centre for Cancer: Improving outcomes for people with skin tumours including melanoma. London: National Institute for Health and Clinical Excellence, 2006 http://www.nice.org.uk/nicemedia/pdf/CSG_Skin_Manual.pdf.
8. Diffey BL, Langtry JA. Skin cancer incidence and the ageing population. *Br J Dermatol* 2005; 153:679–80.
9. Ceilly RI, Del Rosso JQ. Current modalities and new advances in the treatment of basal cell carcinoma. *Int J Dermatol* 2006; 45: 489-98

10. Mehrany K, Weenig RH, Lee KK *et al.* Increased metastasis and mortality from cutaneous squamous cell carcinoma in patients with chronic lymphatic leukaemia. *J Am Acad Dermatol* 2005; **53**: 1067-71.
11. Goodwin RG, Holme SA, Roberts DL. Variations in registration of skin cancer in the United Kingdom. *Clin Exp Dermatol* 2004;29:328–30
12. British Association of Dermatologists; British Association of Plastic Surgeons. Multiprofessional guidelines for the management of the patient with primary cutaneous squamous cell carcinoma. *Br J Plast Surg* 2003; 56: 85-91
13. Diepgen TL, Mahler V, The epidemiology of skin cancer. *Br.J Dermatology*, 2002.146(61) p.1-6
14. Nguyen, T.H. and D.Q. Ho, Non-melanoma skin cancer. *Curr Treat Options Oncol*,2002. 3(3): p. 193-203
15. Royal College of Pathologists. Minimum Dataset for the Histopathological Reporting of Common Skin Cancers. February 2002
16. Motley, R, Kersey, P. and Lawrence, C. (2002), Multiprofessional guidelines for the
17. management of the patient with primary cutaneous squamous cell carcinoma. *British Journal of Dermatology*, 146: 18–25. doi: 10.1046/j.0007-0963.2001.04615.
18. Foote JA, Harris RB, Giuliano AR *et al.* Predictors for cutaneous basal- and squamous-cell carcinoma among actinically damaged adults. *Int J Cancer* 2001; 95:7–11.
19. Holme, S.A., K. Malinowszky, and D.L. Roberts, Changing trends in non-melanoma skin cancer in South Wales, 1988-98. *Br J Dermatol*, 2000. 143(6): p. 1224-9.)
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