

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

SCOPE

1 **Guideline title**

Cancer of the upper aerodigestive tract: assessment and management of upper aerodigestive tract mucosal cancers

1.1 **Short title**

Cancer of the upper aerodigestive tract

2 **The remit**

The Department of Health has asked NICE to develop a clinical guideline on the assessment and management of upper airways tract cancers.

3 **Need for the guideline**

3.1 **Epidemiology**

- a) Upper airways tract (UAT) cancers encompass a number of cancers arising at different sites in the airways of the head and neck. These comprise cancers of the oral cavity, oropharynx, nasopharynx, hypopharynx, larynx and nasal sinuses.
- b) Squamous cell cancers predominate but other less common cancers can also occur.
- c) In 2013 the Cancer Research UK website published incidence and survival data on all oral cancers which included the lip, mouth, oropharynx and hypopharynx. In 2010, 6539 people were diagnosed with oral cancer in the UK and there were 1985 deaths from oral cancer. It is twice as common in men as in women – incidence rates have almost doubled in the last 25 years, and rates for women have also been increasing in recent years. Oral cancers

are more common in older people (mean age 64 years) but the number of younger people developing these cancers is increasing. Incidence rates are higher in Scotland but similar in England, Wales and Northern Ireland, although there are regional variations. Around 50% of adults diagnosed with oral cancer survive for 5 years or more.

- d) Laryngeal cancer is almost 5 times more common in men than in women. In 2010, 2337 people were diagnosed with laryngeal cancer in the UK and there were 760 deaths from laryngeal cancer. It is rarely diagnosed in people aged under 40. But over 40 years, the incidence of laryngeal cancer rises steeply with nearly three quarters of cases in people aged 60 and over. Around 85% of people with laryngeal cancer will survive the disease for at least 1 year. The 5-year survival rate is around 67%.
- e) Figures for other cases of upper airways tract cancers diagnosed each year in the UK are:
- 460 nasal sinuses
 - 240 nasopharynx
 - 1346 oropharynx
 - 238 hypopharynx.
- f) Nasopharyngeal cancer is more common in some ethnic groups such as people of Chinese origin.
- g) The association between human papilloma virus (HPV) and oropharyngeal cancer is increasingly being recognised. But as the natural history and transmission of oral and oropharyngeal HPV infection is not fully understood, the opportunities for reducing this risk are unclear. Oropharyngeal cancer tends to affect a younger population (mean age 59 years) without traditional risk factors such as smoking and alcohol.

- h) The major risk factors for upper airways tract squamous cell cancer in the UK are tobacco smoking and alcohol consumption. Control of these environmental carcinogens remains the focus for primary and secondary prevention.

3.2 *Current practice*

- a) A multidisciplinary team approach involving ear, nose and throat surgeons, maxillofacial surgeons, plastic surgeons, radiologists, pathologists and specialist oncologists is essential to provide high quality care. Providers of rehabilitation services (such as speech and language therapists and dietitians), restorative dentists, therapy radiographers, clinical nurse specialists, supportive and palliative care practitioners and research staff are also integral members of the upper airways tract cancer multidisciplinary team.
- b) The proximity of upper airways tract cancers to critical structures such as the spinal cord, brain, eyes and major blood vessels poses challenges to treatment.
- c) Over the last 10 years, increasing use of chemoradiotherapy (with or without induction chemotherapy) has resulted in a decrease in the amount of surgery being performed. However, there is wide variation across the UK in the rates of these procedures.
- d) There has also been a change in the treatment of laryngeal cancer over the last decade, with increasing use of laser treatment for early stage disease instead of radiotherapy.
- e) Since the publication of [Cetuximab for the treatment of locally advanced squamous cell cancer of the head and neck](#) (NICE technology appraisal guidance 145) it has become standard treatment for people not fit enough to have chemoradiotherapy.
- f) There has been an increase in the use of intensity modulated radiotherapy (IMRT) techniques to treat upper airways tract cancer.

- g) Positron emission tomography (PET) is also increasingly used for investigating upper airways tract cancers, but there is uncertainty about the indications for its use.
- h) The involvement of multiple health professionals can lead to fragmentation of care. [Service guidance on improving outcomes in head and neck cancers](#) (NICE cancer service guidance CSGHN) recommended the composition and organisation of services for upper airways tract cancers in England and its implementation continues to be assessed against peer review measures published in the Department of Health's [Manual for cancer services](#), 2008: Head and neck measures.
- i) The findings from the latest 'National peer review of UAT services in England' (scheduled for publication in October 2013) show that there are currently 49 upper airways tract cancer multidisciplinary teams. The median compliance of upper airways tract cancer services with the measures increased from 79% in 2011/2012 to 90% in 2012/2013. However, some issues of concern were identified including:
- treatment management decisions and protocols not always communicated clearly between oncologists in different multidisciplinary teams
 - lack of restorative dentists and dietitians
 - limited availability and lack of continuity of trained nursing staff to support clinicians during surgery
 - delays in diagnosis, resulting in a failure to meet waiting time targets.
- j) Several areas of good practice were identified. These included:
- surgery performed at a single designated site within a region
 - routine provision of intensity modulated radiotherapy for all people for whom it is appropriate

- development of enhanced recovery programmes and day-of-surgery admissions
- dedicated slots provided for dental assessments before radiotherapy
- use of craniofacial 3D modelling.

Data collection using the National Head and Neck Cancer Audit (DAHNO audit dataset) continues to improve.

4 The guideline

The guideline development process is described in detail on the NICE website (see section 6, 'Further information').

This scope defines what the guideline will (and will not) examine, and what the guideline developers will consider. The scope is based on the referral from the Department of Health.

The areas that will be addressed by the guideline are described in the following sections.

4.1 Population

4.1.1 Groups that will be covered

- a) Adults and young people (16 years and older) referred from primary care with suspected cancer of the upper airways tract (including cancers of the oral cavity, oropharynx, nasopharynx, hypopharynx, larynx and nasal sinuses).
- b) Adults and young people (16 years and older) with newly diagnosed or recurrent cancer of the upper airways tract (including cancers of the oral cavity, oropharynx, nasopharynx, hypopharynx, larynx and nasal sinuses).
- c) Subgroups identified as needing specific consideration will be considered during the development of the guideline.

4.1.2 Groups that will not be covered

- a) Adults and young people (16 years and older) with cancer of the thyroid.
- b) Adults and young people (16 years and older) with cancer of the orbit.
- c) Adults and young people (16 years and older) with cancers of the middle ear.
- d) Adults and young people (16 years and older) with cancers of the cutaneous (sun-exposed) lip.
- e) Adults and young people (16 years and older) with skull base cancers.
- f) Adults and young people (16 years and older) with salivary gland cancer.
- g) Adults and young people (16 years and older) with sarcoma.
- h) Adults and young people (16 years and older) with lymphoma.
- i) Children under 16 years.

4.2 Setting

- a) All settings in which NHS-funded care is received.

4.3 Management

4.3.1 Key issues that will be covered

- a) The information and support needs of people with upper airways tract cancers and their carers at diagnosis, at treatment planning, and during and after treatment.
- b) The most effective investigative pathways for assessing undiagnosed neck lumps.

- c) The most effective investigative pathways for staging newly diagnosed and recurrent upper airways tract cancer (including unknown primary of presumed upper airways tract origin).
- d) The most effective treatment for carcinoma of the larynx (including surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies).
- e) The most effective treatment for carcinoma of the hypopharynx (including surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies).
- f) The most effective treatment for carcinoma of the oral cavity (including surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies).
- g) The most effective treatment for carcinoma of the nasopharynx (including surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies).
- h) The most effective treatment for carcinoma of the nasal sinuses (including surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies).
- i) The most effective treatment for carcinoma of the oropharynx (including surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies).
- j) The most effective treatment for unknown primary of presumed upper airways tract origin (including surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies).
- k) The specific identification and management issues for HPV-associated cancers of the upper airways tract.

- l) The most effective treatment for upper airways tract mucosal melanoma (including surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies)?
- m) The optimum follow-up pathway for people with upper airways tract cancer (including duration, frequency, investigations).
- n) The effectiveness of palliative therapies (including surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies) in the management of locally advanced and/or metastatic upper airways tract cancer.
- o) Management of the long-term consequences of upper airways tract cancer treatment (including rehabilitation).
- p) The effect of smoking cessation on treatment outcome in people with upper airways tract cancer.
- q) The most appropriate nutritional and speech and language support for people having treatment for upper airways tract cancer.

4.3.2 Issues that will not be covered

- a) Referral from primary care with suspected upper airways tract cancer (this will be covered by 'Suspected cancer', the update of [Referral guidelines for suspected cancer](#) [NICE clinical guideline 27]).

4.4 Main outcomes

- a) Overall survival.
- b) Disease-free survival.
- c) Disease-related morbidity.
- d) Treatment-related morbidity.
- e) Treatment-related mortality.

- f) Diagnostic accuracy.
- g) Number and length of admissions to hospital after diagnosis.
- h) Health-related quality of life.
- i) Cost effectiveness.

4.5 Review questions

Review questions guide a systematic review of the literature. They address only the key clinical issues covered in the scope, and usually relate to interventions, diagnosis, prognosis, service delivery or patient experience. Please note that these review questions are draft versions and will be finalised with the Guideline Development Group.

- a) What are the information and support needs of people diagnosed with upper airways tract cancer (at first diagnosis, during treatment, post treatment)? (4.3.1.a)
- b) What are the most effective investigative pathways for assessing undiagnosed neck lumps (for example, fine needle aspiration cytology, core biopsy, imaging techniques)? (4.2.3.b)
- c) What are the most effective investigative pathways for staging newly diagnosed upper airways tract cancer (for example, computerised tomography (CT), magnetic resonance imaging (MRI), positron-emission tomography with computerised tomography (PET-CT), fine-needle aspiration cytology (FNAC), ultrasound (US), contrast swallow)? (4.3.1.c)
- d) What are the most effective investigative pathways for staging recurrent upper airways tract cancer (for example, CT, MRI, PET-CT, FNAC, US, contrast swallow)? (4.3.1.c)
- e) What are the most effective investigative pathways for staging unknown primary cancers of presumed upper airways tract origin (for example, CT, MRI, PET-CT, FNAC, US, contrast swallow)? (4.3.1.c)

- f) What is the most effective treatment for carcinoma of the larynx (for example, surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies)? (4.3.1.d)
- g) What is the most effective treatment for carcinoma of the hypopharynx (for example, surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies)? (4.3.1.e)
- h) What is the most effective treatment for carcinoma of the oral cavity (for example, surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies)? (4.3.1.f)
- i) What is the most effective treatment for carcinoma of the nasopharynx (for example, surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies)? (4.3.1.g)
- j) What is the most effective treatment for carcinoma of the nasal sinuses (for example, surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies)? (4.3.1.h)
- k) What is the most effective treatment for carcinoma of the oropharynx (for example, surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies)? (4.3.1.i)
- l) What is the most effective treatment for unknown primary of presumed upper airways tract origin (for example, surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies)? (4.3.1.j)
- m) What are the indications for HPV testing in people with upper airways tract cancer? (4.3.1.k)
- n) What is the most effective HPV testing strategy for people with upper airways tract cancer? (4.3.1.k)
- o) What are the most effective treatments for HPV-positive people diagnosed with upper airways tract cancer? (4.3.1.k)

- p) What is the most effective treatment for upper airways tract mucosal melanoma (for example, surgery, radiotherapy, chemoradiotherapy, chemotherapy or other systemic therapies)? (4.3.1.l)
- q) In people who are asymptomatic and who have undergone treatment for upper airways tract cancer with curative intent, what is the optimal method(s), frequency, and duration of follow-up? (4.3.1.m)
- r) What is the most effective palliative treatment for people with locally advanced and/or metastatic upper airways tract cancer (for example, dyspnoea, dysphagia, fistulas)? (4.3.1.n)
- s) What are the most effective methods of managing the long-term consequences of upper airways tract cancer treatment (for example, xerostomia, radionecrosis, fatigue, dysphagia, tracheostomy)? (4.3.1.o)
- t) Does smoking cessation affect outcomes for people with upper airways tract cancer? (4.3.1.p)
- u) What is the most effective protocol for nutritional support in people having treatment for upper airways tract cancer? (4.3.1.q)
- v) What is the most effective protocol for speech and language support in people having treatment for upper airways tract cancer? (4.3.1q)

4.6 *Economic aspects*

Developers will take into account both clinical and cost effectiveness when making recommendations involving a choice between alternative interventions. A review of the economic evidence will be conducted and analyses will be carried out as appropriate. The preferred unit of effectiveness is the quality-adjusted life year (QALY), and the costs considered will usually be only from an NHS and personal social services (PSS) perspective. Further detail on the methods can be found in [The guidelines manual](#).

4.7 Status

4.7.1 Scope

This is the final version of the scope.

4.7.2 Timing

The development of the guideline recommendations will begin in December 2013.

5 Related NICE guidance

5.1 Published guidance

5.1.1 NICE guidance to be updated

This guideline will not update or replace any NICE guidance.

5.1.2 NICE guidance to be incorporated

This guideline will not incorporate any NICE guidance.

5.1.3 Other related NICE guidance

- [Opioids in palliative care](#). NICE clinical guideline 140 (2012).
- [Patient experience in adult NHS services](#). NICE clinical guideline 138 (2012).
- [Metastatic malignant disease of unknown primary origin](#). NICE clinical guideline 104 (2010).
- [Cetuximab for the treatment of recurrent and/or metastatic squamous cell cancer of the head and neck](#). NICE technology appraisal guidance 172 (2009).
- [Medicines adherence](#). NICE clinical guideline 76 (2009).
- [Metastatic spinal cord compression](#). NICE clinical guideline 75 (2008).
- [Cetuximab for the treatment of locally advanced squamous cell cancer of the head and neck](#). NICE technology appraisal guidance 145 (2008).
- [Service guidance on improving outcomes in head and neck cancers](#). NICE cancer service guidance (2004).

- [Improving supportive and palliative care for adults with cancer](#). NICE cancer service guidance (2004).

5.2 Guidance under development

NICE is currently developing the following related guidance (details available from the NICE website):

- Referral for suspected cancer (update). NICE clinical guideline. Publication date to be confirmed.

6 Further information

Information on the guideline development process is provided in the following documents, available from the NICE website:

- [How NICE clinical guidelines are developed: an overview for stakeholders the public and the NHS: 5th edition](#)
- [The guidelines manual](#).

Information on the progress of the guideline will also be available from the [NICE website](#).