

British Association of Head and Neck Oncologists (BAHNO) standards 2020

Andrew Schache¹ | Cyrus Kerawala² | Omar Ahmed³ | Peter A. Brennan⁴ |
 Florence Cook⁵ | Matthew Garrett⁵ | Jarrod Homer⁶ | Ceri Hughes⁷ |
 Catriona Mayland⁸ | Radu Mihai⁹ | Kate Newbold¹⁰ | James O'Hara¹¹ | Justin Roe¹² |
 Amen Sibtain¹³ | Maria Smith¹⁴ | Selvam Thavaraj¹⁵ | Alex Weller¹⁶ | Lucinda Winter⁹ |
 Vanessa Young⁴ | Stuart C Winter^{9,17}

¹Liverpool Head & Neck Centre, Liverpool University Hospitals NHS Foundation Trust, Liverpool, UK

²The Royal Marsden Hospital, London, UK

³Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle upon Tyne, UK

⁴Portsmouth Hospitals, Portsmouth, UK

⁵University College London Hospitals NHS Foundation Trust, London, UK

⁶Manchester Academic Health Sciences Centre (MAHSC), University of Manchester, Manchester, UK

⁷University Hospitals Bristol & Weston NHS Foundation Trust, Bristol, UK

⁸Department of Oncology and Metabolism, University of Sheffield, Sheffield, UK

⁹Oxford University NHS Foundation Trust, Oxford, UK

¹⁰The Royal Marsden NHS Foundation Trust, London, UK

¹¹Freeman Hospital, Newcastle Upon Tyne, UK

¹²Department of Speech, Voice and Swallowing, The Royal Marsden NHS Foundation Trust, London, UK

¹³Barts Health NHS Trust, London, UK

¹⁴Greater Glasgow & Clyde Health Board, Royal Alexandra Hospital and Queen Elizabeth University Hospital, Glasgow, UK

¹⁵Guy's & St Thomas' NHS Foundation Trust/King's College London, London, UK

¹⁶London North West University Healthcare NHS Trust, London, UK

¹⁷Nuffield Department of Surgical Sciences, University of Oxford, Oxford, UK

Correspondence: Stuart C Winter, Nuffield Department of Surgical Sciences, University of Oxford, Oxford, UK.

Email: stuart.winter@nds.ox.ac.uk

Keywords: cancer, head and neck

1 | OVERVIEW

1.1 | Statement from the 2019-20 BAHNO President

The Association was first constituted in 1967 as the Association of Head and Neck Oncologists of Great Britain and in 1995 changed its name to the British Association of Head and Neck Oncologists (BAHNO). The

stimulus for its formation remains our aim, namely the need to encourage discussion and the sharing of knowledge between the various clinical and research specialties involved in the management of the diverse group of conditions that make up head and neck cancer. Although those of us working in the field have strong links with other relevant individual medical and paramedical specialties BAHNO remains the only truly multidisciplinary professional group which can represent the interests of head and neck cancer clinicians and patients in the United Kingdom.

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2021 The Authors. *Journal of Oral Pathology & Medicine* published by John Wiley & Sons Ltd.

BAHNO first published a document on the provision and quality assurance for head and neck cancer as long ago as 2002, setting standards for multidisciplinary care in so doing. In 2009, it once again contributed to the continuing improvements in the management of our patients by publishing standards for the process of head and neck cancer care that have been used both within the United Kingdom and abroad as a vehicle for change over the past decade. I am delighted that BAHNO has once again been at the forefront of clinical improvement in publishing this document which continues the theme of the association in representing the multidisciplinary nature of our work in treating head and neck cancer.

I would like to thank the contributors for their tireless work and in particular Stuart C Winter and Andrew Schache for overseeing the project and bringing this publication to the light of day.

Professor Cyrus Kerawala

BAHNO President

2 | TERMS OF REFERENCE

This standards document represents the revised and updated BAHNO Standards previously published in 2009.

These Standards pertain primarily, although not exclusively, to the configuration and organisation of services tasked with the management of individuals with squamous cell carcinoma of the head and neck. Within this context, salivary and regional metastases of cutaneous squamous cell carcinoma of the head and neck are also considered. The standards have taken reference from national published guidance to inform the recommendations.¹⁻¹⁵

The 2020 BAHNO Standards have been updated to include thyroid malignancies in keeping with the role that members of specialties aligned to BAHNO play in the overwhelming majority of these cancers.

Whilst there are elements of these Standards that might similarly be applicable to units/trusts providing management of sarcomas and/or lymphoproliferative diseases, these tumour types were not specifically considered within the remit of these BAHNO Standards.

3 | SERVICE CONFIGURATION

3.1 | Co-ordination of services

ALL units/centres should have a named head and neck clinical lead responsible for the overall unit.

ALL units should have a named lead responsible for co-ordinating the local provision of care.

ALL individuals should be seen by a specialist head and neck nurse/clinical nurse specialist (eg Macmillan nurses in the UK) whose contact details should be made available to the patient at the earliest opportunity.

ALL centres should have a list of consultants who are designated to provide head and neck cancer care.

3.2 | Referral to specialist head and neck cancer services

Referrals should adhere to national and local guidelines. Referrals using the UK "Two-week wait (2WW)" pathway should have sufficient detail to allow for triage into the most appropriate clinic. Referrals should contain sufficiently detailed information such that pre-referral investigations can be completed if necessary. There should be a secure image transfer system so any accessible lesions (inc. oral cavity) can be assessed. There should be an agreed pathway for a senior clinician to downgrade 2WW referrals if considered benign.

Referral outside the urgent pathway, particularly by routine mail, should be discouraged. However, where unavoidable, the same information is required.

The referral system should be sufficiently robust to support referral from both general medical and dental practitioners.

Referrals should be sent to appropriate specialties:

- Hoarseness to ear, nose and throat surgery (ENT)
- Oral ulcers/lesions to oral and maxillofacial surgery (OMFS)
- Neck lumps/salivary gland lesions to ENT or OMFS
- Suspected unknown primary of the head and neck to ENT or OMFS
- Management of neck and parotid lumps in those individuals under the care of other specialties (eg skin cancer patients treated by plastic surgeons, ENT or OMFS) will reasonably continue to ensure continuity of care, ensuring appropriate head and neck MDT discussion still occurs. Onward referral to dedicated head and neck services should be made where appropriate.

No patients presenting with the above conditions should be referred to general surgeons.

There should be an awareness and consideration of the national guidance regarding the urgent cancer diagnostic services.

3.3 | Information technology

ALL host trusts should provide funding for hardware, software, annual licenses and updates to maintain the services detailed in these Standards.

ALL trusts should also provide adequate administrative support to collect and enter data into regional and national cancer registries.

ALL units to have a named and dedicated IT co-ordinator.

ALL trusts should have strategic plans to introduce IT and pathway solutions capable of continually optimising head and neck cancer pathways (diagnostic and therapeutic).

3.4 | Patient information

3.4.1 | Documentation of information provided to individuals and carers following a “significant (bad) news” consultation

All individuals should be made aware of their diagnosis unless they make an express wish to the contrary. The subsequent depth of detail provided should be tailored to the individual's requests but must be sufficient to allow the making of informed decisions.

All patient notes should document what the individual and his/her carers have been told about the diagnosis, the aims of treatment and the treatment being offered.

3.4.2 | Communication with primary care

Serious diagnosis communication should be made with primary care physicians in ALL instances following a new diagnosis of cancer.

Following admission for definitive surgery or completion of cancer treatment, units should have a written protocol and or/checklist including:

- Brief overview of the treatment received
- Name and contact details of head and neck key worker for individuals/carers and GP
- Diagnosis, treatment undertaken and complications with dates
- Follow-up arrangements.

3.4.3 | Information about treatment

Patients should be provided with consistent information and support at diagnosis in line with the NICE service guidance on improving outcomes in head and neck cancer and recommendations of the National Peer Review Programme. Where appropriate, this should include details of disease aetiology (eg information about Human papillomavirus (HPV) to individuals with HPV-associated oropharyngeal squamous cell carcinoma).

Information and support should be tailored to the individual's needs (including the benefits and side effects of treatment, psychosocial and long-term functional issues).

Details of available peer-support services should be made available to patients for all standard treatment pathways—this may be in variable formats (eg written leaflets, brail and electronic) and languages.

4 | DIAGNOSIS AND STAGING

4.1 | Outpatient facilities

ALL units to have appropriate equipment such that clinical images can be taken and used and shared for disease monitoring and MDT discussion.

It is desirable to have access to narrow band imaging.

ALL outpatients should have video screens to support provision of nasendoscopy and rigid endoscopy of the nasal cavity.

There should be facilities for photo-documentation with digital storage.

The following should be available in the head and neck outpatient setting:

- A microscope available for aural examinations
- Facilities for dental assessments, minor oral surgery (biopsy and dental extractions) and dental radiology, the latter to include the minimum of a dental panoramic tomogram (DPT) but where possible to include access to intra-oral radiographs
- Appropriate personal protective equipment (PPE) available as recommended by national guidelines.

4.2 | Examination under anaesthesia

There should be facility for ALL individuals to undergo examination under anaesthesia (EUA) where the clinician deems it necessary to make robust therapeutic decisions.

4.3 | Radiology

Standard imaging protocols should be applied for ALL CT, MRI, ultrasound and FDG PET-CT studies, and these should comply with Royal College of Radiologists' recommendations or equivalent.

Cross-sectional imaging CT/MRI should be reported by a specialist head and neck radiologist. ALL head and neck imaging should be reported by this dedicated team.

PET/CT should be reported by specialist head and neck nuclear medicine physician/radiologist.

All staging scans should be reported prior to commencement of treatment and, ideally, prior to primary tumour biopsy.

Systemic imaging (thoracic CT) should be available for ALL individuals with cancer of the upper aerodigestive tract. In early-stage disease (eg T1N0 or T2N0), this should not delay treatment.

ALL sites must have access to CT/MRI for imaging of ALL individuals, to conform with RCR guidance.

PET-CT should be available for the assessment of:

- An unknown primary
- T4 cancer of the hypopharynx or nasopharynx
- N3 staging of cancer of the upper aerodigestive tract
- Tumour response after treatment with chemoradiotherapy.

A DPT is required as a minimum for all patients prior to undergoing a dental assessment. This assessment should be supported by intra-oral radiographs where necessary.

4.4 | Pathology

4.4.1 | Fine-needle aspiration

Provide fine-needle aspiration cytology/core biopsy analysis for ALL individuals with a neck lump that is suspected of being cancer of the upper aerodigestive tract. This should be performed by a specialist radiologist, pathologist or clinician. The biopsy laterality and biopsy site must be documented in ALL instances.

Aim to perform ALL fine-needle aspiration cytology or core sampling under ultrasound guidance. ALL ultrasound-guided fine-needle aspiration cytology should be subject to rapid on-site evaluation/assessment (ROSE/ROSA).

Fine-needle aspiration or biopsies should be interpreted by a cytopathologist with head and neck interest and reported *within 7 calendar days*.

4.4.2 | External pathology

In ALL units, capacity should be available to review biopsy specimens of cancer diagnosed in primary or secondary care. Where this deemed necessary, it should be by a specialist head and neck pathologist within the tertiary care setting.

4.4.3 | Pathology in the MDT

ALL new cases should have a histological diagnosis of cancer prior to treatment planning (except in exceptional circumstances, eg in individuals for whom an open or core biopsy is inappropriate or not possible).

Surgical margins must be discussed for ALL patients within the MDT and documentation made of the significance and recommendation for acting on close or involved margins.

4.4.4 | Reporting

ALL surgically resected cases should include all core data set items for head and neck cancer histopathology reporting. There should be at least one named pathologist per centre participating in the national external quality assurance scheme.

ALL incisional biopsies and core biopsies for suspected cancer should be reported *within 7 calendar days* (confirming or excluding diagnosis of malignancy as a minimum).

Reporting of definitive resection specimens should be reported *within 10 calendar days* where decalcification is not required.

ALL squamous cell carcinomas of the oropharynx should be tested to determine HPV status.

ALL centres should have access to:

- Diagnostic and predictive molecular testing
- Histological frozen section facilities for intra-operative diagnosis where units offer surgical treatment.

4.5 | Multidisciplinary head and neck cancer clinics

4.5.1 | Timetabling

ALL individuals should be staged weekly in each unit undertaking head and neck cancer treatment using the current staging (TNM8 at time of publication).

The structure of the multidisciplinary team (MDT) must allow capability for membership of the MDT to participate virtually (eg teleconference/video conference).

4.5.2 | Staffing

It is recommended that, as a minimum, the MDT should consist of the following professionals with specialist interest in head and neck cancer:

- At least four appropriately trained Head and Neck surgeons (at least 50% of time devoted to head and neck oncology), at least one of whom should have specialist head and neck reconstructive skills
- There should be both a surgeon and an oncologist at all MDT clinics
- At least two head and neck oncologists (at least 50% of time devoted to head and neck oncology) present in 100% of clinics
- Clinical nurse specialist*
- Speech and language therapist*
- Dietitian*
- Histopathologist and cytopathologist
- Radiologist
- Restorative dentist

*The number needs to be sufficient to cover the MDT at all times, for example leave and absence.

There should be a pathway for ALL units to refer for additional support services including (but not exclusively):

- Psychological support
- Lymphoedema care
- Financial welfare support
- Physiotherapy and occupational therapy.

ALL individuals with palliative care needs (anticipated or otherwise) should have both timely referral and clear access to their local palliative care services.

4.5.3 | MDT clinic configuration

Facility should be available for both a head and neck surgeon and a head and neck oncologist to undertake joint consultations (particularly where treatment equipoise exists or where support of combined treatment planning is necessary).

4.6 | Multidisciplinary team meetings

4.6.1 | Individual patient discussion

ALL individuals with a new or recurrent head and neck cancer diagnosis should be discussed by an MDT prior to treatment; this discussion should be documented in MDT outcomes.

Where treatment needs to be expedited (prior to or following MDT discussion) there should be an agreed pathway so as to not delay treatment. MDT discussion should still occur and be recorded.

4.6.2 | Treatment planning pathway

The agreed treatment pathway should ideally be formulated at the first MDT for ALL patients.

That agreement must either prescribe definitive treatment OR outline necessary investigations leading to final treatment plan.

The aim of treatment (curative/palliative) should be documented in MDT outcomes for ALL individuals being discussed within that MDT.

In ALL cases, the recommended treatment plan should be communicated to the individual and carers verbally, to the GP in writing.

5 | INPATIENT CARE

5.1 | Nursing staff

The nurse in charge on each shift should have a specialist qualification in a related discipline and a minimum of 5 years of experience.

Two other nurses on the staff should have, or be preparing for, a specialist qualification in related disciplines.

Nursing staff (including health care assistants) should have competencies associated with altered airway management and major haemorrhage in the head and neck setting.

Nurses should be informed and aware of ongoing clinical research projects, audits and clinical trials.

5.2 | Head and neck care

Higher advice at experienced specialist registrar AND consultant level to be available 24 hours a day, every day.

5.3 | Other staffing

Named speech and language therapist, dietitian/nutritional nurse specialist, physiotherapist, pharmacist, dental hygienist, psychologist and social worker.

ALL individuals should:

- Have access to dedicated inpatient dietetic, physiotherapy, occupational therapy and speech and language/swallowing therapy, clinical nurse specialist. Further detail of their broader roles is provided below. This applies equally to people recovering from surgery and to those admitted with treatment-related toxicities.

Multidisciplinary assessment in line with pre-habilitation and enhanced recovery protocols is to be encouraged in ALL units and for ALL individuals.

5.4 | Patient admission

Patients should be provided with proposed treatment dates within national targets/guidelines in ALL cases.

Arrangements should be available for pre-operative assessment prior to admission in ALL units delivering surgical treatment for head and neck cancer.

Comprehensive multidisciplinary discharge planning should be instigated at admission. This might include feeding arrangements, airway/tracheostomy care and mouth care.

5.5 | Operating theatres

5.5.1 | Staffing

The senior nurse should have a specialist qualification in a related discipline.

Staff should include one other nurse with or studying specialist qualification in a related discipline.

Theatre staff should have an adequate skill set to manage the full range of head and neck cancer patients. Specialist ongoing training in head and neck procedures should be available for all members of the theatre staff.

5.5.2 | Anaesthetics

There should be one or more named consultant anaesthetist(s) with advanced expertise in head and neck anaesthesia and complex airway management (inc. jet ventilation, awake fibre-optic intubation). They should be responsible for directly or indirectly overseeing 100% of major head and neck operations.

5.5.3 | Provision of equipment in centres offering diagnostic procedures

- Capability to record photographic/digital imaging
- Appropriate endoscopy and biopsy facilities with associated instrumentation.

5.5.4 | Provision of equipment in centres offering treatment surgery procedures

This should include:

- A range of Hopkins rod telescopes.
- Laser instrumentation (suitable for head and neck use).
- Two-headed operating microscope appropriate for microvascular surgery and associated microvascular instruments.

This is not an exhaustive list, and other available equipment should include all materials, technologies and resources befitting of a service delivering high-quality care.

5.5.5 | Provision of facilities

Adequate theatre capacity for extended day theatre session for major/complex procedures (eg three-session lists if needed).

ALL units must retain availability of HDU and ITU in the same building.

6 | THERAPEUTIC CARE PATHWAYS AND STANDARDS

6.1 | Surgery—site specific

6.1.1 | Larynx

ALL individuals with early laryngeal cancer should have a pathway to discuss transoral laser surgery as well as radiotherapy.

Units treating individuals with advanced disease should provide ALL individuals with access to resective and reconstructive surgical options, and appropriate adjuvant treatments.

6.1.2 | Oral

ALL units should offer or have a pathway to offer sentinel node biopsy for ALL individuals with early oral SCC

6.1.3 | Oropharynx

ALL units should have a pathway for offering minimally invasive surgical alternatives—transoral robotic surgery (TORS) and/or transoral laser microsurgery (TLM).

6.1.4 | Hypopharynx

ALL individuals with early hypopharyngeal cancer should have a pathway to discuss organ-preservation treatment.

Units treating individuals with advanced disease should provide ALL individuals with access to resective and reconstructive surgical options, and appropriate adjuvant treatments.

6.1.5 | Cancer of unknown primary

ALL units treating individuals with unknown primary tumours of the head and neck should have access to 18-fluorodeoxyglucose positron emission tomography (FDG PET)-CT scanning facilities.

Excisional biopsy of the malignant (suspected or otherwise) neck mass must not be undertaken without prior discussion in the specialist head and neck MDT.

There should be an agreed protocol for the surgical assessment of the primary site when FDG PET-CT does not identify a possible primary site. There should be an agreed pathway for a tongue base mucosectomy where indicated.

6.1.6 | Salivary gland malignancy

ALL primary salivary gland malignancies must be discussed in the head and neck MDT.

These rare tumours require specialist care including access to appropriate histopathological expertise and diagnostic molecular testing (or a pathway to provide tertiary opinion where not available).

All units treating parotid malignancies should have a pathway for rehabilitation of facial nerve function.

6.1.7 | Skull base malignancy

All malignant skull base tumours should be discussed within a specialist skull base MDT, to include:

- Head and neck ablative surgeon with appropriate expertise in skull base surgery (anterior and lateral skull base with sufficient numbers of cases)
- Neurosurgeon
- Reconstructive surgeon (see below)
- Head and neck oncologist.

6.2 | Reconstruction

6.2.1 | Provision of techniques

Surgeons providing reconstruction for head and neck defects must have a specialist interest in head and neck surgery with prior training and experience.

The range of reconstructive options offered by reconstructive surgeons must be commensurate with the ablative defect and be deemed to be contemporary practice.

Where this is not available, units must be able to offer onward referral, or have documented referral pathways to specialist centres providing such services, ensuring ALL reconstructive options are available for ALL individuals.

ALL units providing this reconstructive service must have systems in place to achieve a timely AND safe return to theatre where necessary, ensuring the appropriate surgical skill mix is available at all times. Provision of a reconstructive service must be supported by a robust microvascular on-call service.

The minimum indicative number of free flap cases undertaken within an individual MDT structure should exceed 25 per annum.

Free flap success for ALL units must exceed 90% and ideally be above 95%.

ALL surgeons providing head and neck reconstructive services should maintain documented evidence of the number of flaps undertaken annually with associated success rates, so as to facilitate comparison within their unit/MDT structure.

ALL units should audit free flap outcomes annually including:

- Number of free flap procedures undertaken
- Returns to theatre
- Salvage rates
- Overall success (partial or otherwise)
- Patient length of stay.

ALL units should be prepared to present their outcomes following free flap reconstruction for external peer review.

6.3 | Radiotherapy

6.3.1 | Quality

IMRT in ALL cases where critical sparing would not be achievable by 3D conformal radiotherapy planning.

Peer review ALL curative H&N radiotherapy contours before treatment begins.

There should be a minimum of two head and neck clinical oncologists in each unit to provide seamless continuity of service and optimise quality.

6.3.2 | Timing

ALL radical treatments should start within 17 days of the decision to treat with recording of clinically justifiable delays. This pathway should be audited regularly to enable redesign to facilitate improvement.

For radiotherapy delivered with palliative intent, treatment should commence within 14 days of the decision to treat.

All unplanned breaks must be managed according to RCR criteria.

Completion of adjuvant therapy should aim to be within 100 days of commencement of definitive therapy in ALL cases. Extension of this time frame should only be where patient-specific factors dictate this need.

6.3.3 | Regimens

ALL centres to have written protocols for different tumour sites and intents, either produced locally or using national guidelines. These should be reviewed and updated in the light of research trial evidence at least every two years.

6.4 | Systemic anticancer therapy

6.4.1 | Chemotherapy, monoclonal antibodies and immunotherapy regimens

Evidence-based guidelines for the use of chemoradiotherapy and for palliative systemic therapies should be present in 100% of units.

6.4.2 | Compliance

Any deviation from national protocols needs to be documented and agreed within MDT structures.

6.5 | Allied health professionals

6.5.1 | Holistic needs assessment

All patients should be offered a holistic needs assessment at diagnosis, post-treatment and as required thereafter—this allows healthcare professionals to understand needs and signpost to other services as appropriate.

Discharge planning, feeding/airway/community support, etc., should begin prior to admission.

6.5.2 | Clinical Nurse Specialist (CNS)

ALL units should make adequate provision of CNS posts/individuals to ensure the following essential care elements can be provided at all times:

- CNS involvement in ALL MDT meetings
- Psychosocial support and care co-ordination for ALL individuals being managed in the unit (at varying extent)
- CNS contact with all individuals at the time of diagnosis
- Availability to provide co-ordination of multiprotection care pathways

- Accessibility as a point of contact for expert advice to primary care physicians, district nurses, palliative care teams, etc. (eg tracheostomy and gastrostomy care and wound care)
- Co-ordinated, tailored approach to the provision of support for individuals living with the effects of cancer and long-term consequences of cancer treatment. This should include end of treatment summaries, health and well-being advice, signposting to resources available and appropriate follow-up.

6.5.3 | Speech and language therapist/pathologist

ALL units should have a named speech and language/ swallowing therapist with at least 50% of time dedicated to head and neck cancer care and with specialist surgical voice restoration skills.

ALL individuals who are undergoing treatment likely to disrupt communication or swallowing function should be seen by a speech and language therapist for pre-treatment counselling and a baseline, multidimensional assessment of speech, voice and swallowing, including clinician and patient-reported outcome measures.

The following should be available in ALL units:

- Access to videofluoroscopy and fibre-optic endoscopic evaluation of swallowing (FEES)
- A speech and swallowing therapist present at ALL examinations. The assessment of the nature/extent of any oropharyngeal dysphagia should support and inform compensatory strategies and therapeutic intervention.
- Multidisciplinary assessment in line with pre-habilitation and enhanced recovery protocols
- Access for ALL individuals to speech, voice and swallowing therapy as required, for example on-treatment radiotherapy clinics, in the post-operative setting and at outpatient facilities.

6.5.4 | Dietitian

ALL units should have a named dietitian with at least 50% of time dedicated to head and neck cancer work with specialist knowledge in tube feeding and altered textured diets.

ALL Individuals should be nutritionally screened using a validated tool. Those who are malnourished, or at risk of malnutrition, should be referred to the dietitian for early intervention and nutrition support.

ALL individuals who are undergoing treatment likely to significantly impact on their ability to meet their nutritional requirements should be seen by a specialist dietitian for pre-treatment counselling.

The following should be available in ALL units:

- A baseline assessment should be conducted to assess nutritional status and discuss the need for nutritional support prior, during or after treatment including NG or gastrostomy (PEG or RIG) and/or including prophylactic placement

- As appropriate, the findings of baseline assessments should be made available for discussion at the head and neck MDT to inform treatment planning
- Access for ALL individuals to a dietitian as required, for example on-treatment radiotherapy clinics, in the post-operative setting and at outpatient facilities

If patients are to be referred on to local services, dietitians and speech and language therapists should be available in a consultancy role to support providers in primary care.

6.5.5 | Dental/prosthetic care and rehabilitation

ALL units should have a named Consultant in Restorative Dentistry to lead the dental and oral rehabilitation of patients. A Consultant in Restorative Dentistry should lead pre-treatment oral and dental assessment and planning.

ALL patients undergoing ablative treatment that will alter oral and dental function (including risk of osteoradionecrosis) and/or appearance should also be assessed for dental extractions prior to treatment. Pathways for dental treatment/extractions should be configured so as to avoid delays to definitive cancer treatment.

A suitably qualified practitioner should be available to pre-operatively assess ALL patients who may require orbital, nasal and auricular prostheses. ALL Units should provide (or have a pathway to facilitate) implant-retained prostheses.

ALL individuals should be assessed before and after their main treatment, and this should be led by a Consultant in Restorative Dentistry.

ALL individuals should have access to a suitably experienced dental therapist or hygienist.

ALL dentate individuals should have high concentration of fluoride toothpaste prescribed.

The pre-treatment planning for ALL patients requiring extensive resections involving the tooth-baring tissues should involve a suitably trained restorative dentist.

6.5.6 | Physiotherapy

All centres should have pathways for physiotherapy following surgery.

Progressive resistance training for people with impaired shoulder function should be considered as soon as possible after neck dissection.

6.5.7 | Psychological care

Individuals receiving head and neck cancer care should have access to psychology services, in particular a psychologist with a defined head and neck interest (occupying 25% of job plan).

ALL permanent medical, nursing and allied health professional staff should be aware of written protocols and referral routes for psychological support.

6.5.8 | Addiction support and counselling

Smokers should be offered help to stop smoking in line with the NICE guideline on stop smoking interventions and services. ALL individuals and carers should be informed at the point of diagnosis that continuing to smoke will adversely affect outcomes including treatment-related side effects, risk of recurrence and the risk of second primary cancers.

All patients with alcohol dependency and/or drug misuse should be offered local support before treatment. Heavy-use alcohol and drug dependents may need to be hospitalised for several days pre-surgery to enable safe detox and withdrawal monitoring.

6.5.9 | Palliative care medicine

Hospital medical and nursing staffing

ALL centres to have written guidelines agreed with the local palliative care consultant(s).

ALL units should provide staff training and necessary equipment to support endoluminal debulking of tumours to avoid tracheostomy.

Agreed pathways should exist for tracheostomy advanced care decision-making.

Amongst ALL permanent staff there should be:

- Awareness of protocols for cancer pain management
- Awareness of neuropathic pain and routine management strategies
- Knowledge of route of referral to palliative care (person, place, method).

Crisis planning

ALL units and hospices managing individuals with head and neck cancer should adhere to local guidelines for tracheostomy blockage and major haemorrhage.

ALL specialist head and neck ward nurses should be aware of these protocols.

Individuals (and their carers) at risk of these crises should be made aware of the warning signs in ALL cases unless the patient has expressed a wish to not be provided with this information.

Living with cancer

An individual approach to end of life care (last 12 months of life), including clear documentation and communication with each relevant team providing palliative care, must be employed for ALL individuals. This may include liaison with primary care and specialist palliative care teams. Clear offers must be made to discuss and implement advance care plans with all patients. These may reasonably include

patients' preferred place of care, agreed thresholds or ceilings of treatment.

For those recognised to be dying (last days of life), an individualised care plan should support care for ALL individuals.

7 | THYROID CANCER

The clinical management of thyroid cancer is not intended to be addressed in detail within this document. Detailed guidelines on management of thyroid cancer are already contained within a comprehensive publication produced by the British Thyroid Association (BTA). BAHNO intends this section on thyroid cancer to be complementary to these and supplementary to the standards already described for the management of upper aerodigestive tract (UAT) cancer.

The management of differentiated thyroid cancer (DTC) (a highly curable disease) and of medullary thyroid cancer (MTC) should be the responsibility of a specialist MDT. The membership of this will normally be appointed by the regional cancer network.

In this section, we highlight guiding principles of management of thyroid cancer. Many of the principles take origin from the Improving Outcomes in Head and Neck Cancers, 2004, and the Manual for Cancer Services 2008, Head and Neck Measures.

NICE guidance is expected to be released in April 2022.

7.1 | Principles

ALL patients with thyroid cancer, including those whose cancer is discovered after surgery for apparently benign disease, should be referred for discussion of the patient's management by a thyroid cancer MDT.

The management of thyroid cancer should be the responsibility of the specialist MDT, membership of which will normally be agreed by the regional cancer network and according to the Manual for Head and Neck Cancer services.

Patient-shared decisions are important for a significant number of patients, particularly in areas with no clear evidence base to direct management. This could apply equally to those with low-risk or advanced-stage disease. This may be based on patient views, concerns and willingness to undergo long-term follow-up.

Where possible, patients should be considered for enrolment in clinical trials.

MDTs for thyroid cancer may function separately from those managing UAT, or as part of a combined MDT with a UAT team and they should cover a minimum catchment population of one million for referral of thyroid cancer.

ALL members of the designated MDT should have a specialist interest in the management of thyroid cancers and should include:

- Thyroid surgeon
- Pathologist

- Radiologist
- Endocrinologist
- Clinical oncologist
- Nuclear medicine physician
- Medical physicist
- Clinical nurse specialist.

All members of the MDT should maintain thyroid-specific continuing professional development.

Patients will normally be seen by one or more members of the MDT; a combined clinic is recommended.

7.2 | Diagnosis

In many cases, investigation of a neck lump will have a common pathway both in UAT metastasis and in thyroid cancer.

The use of BTA U1-U5 or TIRADS1-5 ultrasound scoring/grading systems is recommended for assessing risk of malignancy and guiding the need for fine-needle aspiration cytology.

As with UAT cancers, fine-needle aspiration biopsy should be carried out by a suitably trained specialist, ideally with ultrasound guidance. This should be offered within a designated neck lump pathway—if possible as a “one-stop” process.

Thyroid cytology should be reported by a cytopathologist with experience in thyroid disease and with access to colleagues with additional experience for second opinions when appropriate. The cytology report should contain a descriptive section interpreting the findings, followed by the “Thy” numerical category as defined by the Royal College of Pathologists.

7.3 | Treatment

In the UK, thyroid surgery is carried out by many specialties (ear nose and throat surgery, endocrine surgery, oral and maxillofacial surgery, general surgery). ALL surgeons must have training and expertise in the management of thyroid cancer and be a core member of the multidisciplinary team (MDT) managing thyroid cancer.

It is expected that ALL surgeons involved in the care of patients with thyroid cancer submit their data to an approved audit, for example that of British Association of Endocrine and Thyroid Surgeons.

Surgeons should perform a minimum of 20 thyroid operations per year.

Surgery for locally advanced thyroid cancer requiring lateral neck dissection should be centralised within each MDT network under the care of recognised surgeons. Similar arrangements should be agreed within the MDT network for the care of patients with medullary thyroid cancer.

Histopathologists reporting thyroid tumours should have a special interest in thyroid pathology or participate in a network with the opportunity of pathology review. Reporting of specimens should

include the nationally agreed minimum data sets as per RCPATH guidelines.

A clinical oncologist or nuclear medicine physician treating thyroid cancer should have training and expertise in the management of thyroid cancer and be a core member of the MDT managing thyroid cancer.

Information on ALL patients diagnosed and treated for thyroid cancer should be collected using approved local cancer network or national databases. Outcomes should be subject to regular audit.

8 | RESEARCH AND AUDIT

8.1 | Clinical trials

There should be a named clinical lead and nurse practitioner for head and neck research.

ALL head and neck clinicians (including trainees) should be encouraged to gain Good Clinical Practice (GCP) Certification (the international ethical, scientific and practical standard to which all clinical research is conducted).

ALL MDTs should be aware of the current head and neck studies in the NCRI national portfolio of clinical studies.

Where a trial or research study exists, individuals should be provided with an opportunity to be included (or onward referral to a unit that can offer recruitment in the situation where an individual chooses).

There should be published statistics of recruitment to clinical studies.

8.2 | Governance and clinical audit

ALL clinicians should be involved in the process and outcome of clinical audit.

The results of audit (local and national) should be publicly available and where appropriate, published in peer-reviewed journals for wider dissemination and uptake.

ALL units should, as a minimum, undertake an annual audit of clinical outcomes and a review of governance structures.

This audit should include the following key performance indicators:

- New cases of head and neck squamous cell carcinoma
 - a. Each unit should audit the number of new patients with head and neck cancer (excluding haematological cancers) annually and record the number of head and neck cancer operations (including the number of neck dissections and free flap procedures).
- Pathological assessment of margins
 - a. this document has removed the historical numerical standard measuring the achievement of clear surgical margins. This reflects a move towards more conservative surgical techniques. However,

adequate surgical excision remains paramount, especially for individuals undergoing single modality surgical treatment. Individual MDTs should demonstrate a clear process of governance regarding surgical margins and oncological outcomes.

- Surgery—as above for reconstruction; free flap success rate
- Oncology
 - a. Proportion of patients requiring primary radical (chemo)radiotherapy starting within 17 days start from the date of decision to treat
 - b. proportion of patients completing adjuvant treatment within 100 days of surgery
 - c. proportion of patients who receive radical radiotherapy having peer review of treatment volumes
 - d. proportion of patients requiring replanning during a radical course of radiotherapy
- Speech and Language Therapy
 - a. ALL individuals undergoing treatment likely to disrupt communication or swallowing function to be seen by specialist Head and Neck cancer speech and language therapist pre-treatment
 - b. Minimum of one clinician-assessed and one patient-reported outcome measure pre-treatment, post-treatment and at discharge
 - c. Recommended measures as follows:
 - Clinician assessed: PSS-HN, 100 mL water swallow test, GRBAS, MIO
 - Patient-reported: MDADI, Speech Handicap Index (as appropriate), VHI
 - The PSS-HN, 100 mL WST, GRBAS, MIO, MDADI are considered the optimal minimum dataset at baseline, 3 and 12 months
 - d. ALL individuals to be seen by SLT during radiotherapy (>60 Gy)
 - e. Instrumental swallowing evaluation (FEES/VF) in ALL people undergoing surgery following chemoradiation, reirradiation and/ or targeted therapies as appropriate for residual/ recurrent disease (instrumental reporting to include validated measures—PAS, DIGEST, NZ Secretion Scale, Yale Residue Scale, Patterson Oedema Scale as appropriate).
- Dietetics
 - a. Feeding within 24 hours of surgery as part of an enhanced recovery after surgery (ERAS) protocol
 - b. Aim for maintenance of weight (<10% weight loss) during the period between initial consultation/diagnosis and 6 months post-completion of treatment.
 - c. ALL individuals to be seen by specialist head and neck dietitian at least once a week during radiotherapy treatment (>60Gy) and as required for rehabilitation
 - d. ALL individuals to be seen by specialist head and neck dietitian pre-treatment.
- Head and neck nursing and holistic care
 - a. ALL patients should see a CNS at the time of diagnosis.
 - b. ALL patients should be offered an holistic needs assessment at diagnosis, following treatment and at any other significant time during their cancer journey.

c. ALL patients should have access to psychological support.

- Restorative dentistry
 - a. ALL patients should receive a dental assessment (including DPT) prior to and after any treatment that impacts upon the oral cavity.
 - b. ALL dentate patients shall be prescribed high concentration fluoride unless otherwise contraindicated.
 - c. ALL patients should receive oral hygiene instruction by a suitably trained member of the dental team.
- Palliative care
 - a. ALL expected inpatient deaths should be reviewed as to whether care in the last days of life was supported with an individualised care plan.

REFERENCES

1. NICE. National Institute for Health Care Excellence. Improving outcomes in head and neck cancers. Cancer service guideline [CSG6] 2004. <https://www.nice.org.uk/guidance/csg6>. Accessed December 1, 2020.
2. NICE. National Institute for Health Care Excellence. Nutrition support for adults: oral nutrition support, enteral tube feeding and parenteral nutrition. Clinical guideline [CG32] 2006 [updated 04 August 2017]. <https://www.nice.org.uk/guidance/cg32>
3. NICE. National Institute for Health Care Excellence. Suspected cancer: recognition and referral. NICE guideline [NG12] 2015 [updated 11 September 2020]. <https://www.nice.org.uk/guidance/ng12>
4. NICE. National Institute for Health Care Excellence. Cancer of the upper aerodigestive tract: assessment and management in people aged 16 and over. NICE guideline [NG36] 2016 [updated 06 June 2018]. <https://www.nice.org.uk/guidance/ng36>
5. NICE. National Institute for Health Care Excellence. Stop smoking interventions and services. NICE guideline [NG92] 2018 [updated 28 March 2018]. <https://www.nice.org.uk/guidance/ng92>
6. Brierley JD (Editor) MKGE, Wittekind C (Editor). *TNM Classification of Malignant Tumours*, 8th ed. Wiley; 2016. <https://www.wiley.com/en-gb/TNM+Classification+of+Malignant+Tumours%2C+8th+Edition-p-9781119263579>
7. BAHNO. British Association of Head & Neck Oncologists Standards; 2009. <https://www.bahno.org.uk>. Accessed December 1, 2020.
8. Paleri V, Roland N. Introduction to the United Kingdom national multidisciplinary guidelines for head and neck cancer. *J Laryngol Otol*. 2016;130(Suppl 2):S3–S4.
9. NPELCP. National Palliative and End of Life Care Partnership. Palliative and End of Life Care: A national framework for local action 2015–2020; 2014. www.endoflifecareambitions.org.uk. Accessed December 1, 2020.
10. RCP. The Royal College of Pathologists. Cancer datasets and tissue pathways. Head and Neck. <https://www.rcpath.org/profession/guidelines/cancer-datasets-and-tissue-pathways.html>. Accessed December 1, 2020.
11. RCP. The Royal College of Pathologists. Dataset for thyroid cancer histopathology reports 2014 [3rd ed.]. <https://www.rcpath.org/profession/guidelines/cancer-datasets-and-tissue-pathways.html>. Accessed December 1, 2020.
12. RCP. The Royal College of Pathologists. Guidance on the reporting of thyroid cytology specimens 2016 [3rd ed.]. https://www.rcpath.org/uploads/assets/7d693ce4-0091-4621-97f79e2a0d1034d6g089_guidance_on_reporting_of_thyroid_cytology_specimens.pdf. Accessed December 1, 2020.
13. Perros P, Boelaert K, Colley S, et al. Guidelines for the management of thyroid cancer. *Clin Endocrinol*. 2014;81(s1):1–122.

14. RCR. The Royal College of Radiologists. The timely delivery of radical radiotherapy: guidelines for the management of unscheduled treatment interruptions 2019 [4th ed.]. https://www.rcr.ac.uk/system/files/publication/field_publication_files/bfco191_radio_therapy-treatment-interruptions.pdf. Accessed December 1, 2020.
15. NCAT. National Cancer Peer Review – National Cancer Action Team. Programme Manual for Cancer Services 2008: Head and Neck Measures; 2008. Accessed December 1, 2020.

How to cite this article: Schache A, Kerawala C, Ahmed O, et al. British Association of Head and Neck Oncologists (BAHNO) standards 2020. *J Oral Pathol Med.* 2021;00:1–12. <https://doi.org/10.1111/jop.13161>