

A growing national health care initiative is gathering momentum to improve the quality of care for all Americans. In parallel with this effort a Quality of Care Committee of the American Head and Neck Society was assembled. The charge of the committee is to formulate evidence-based quality of care measures for patients with head and neck neoplasia. The committee will promote compliance with these standards as a framework for measuring quality of care in head and neck surgery. The Society's quality of care effort will evolve in concert with American Academy of Otolaryngology Head and Neck Surgery's (AAO-HNS) efforts and will concentrate on head and neck surgery, whereas the AAO-HNS is prioritizing all aspects of otolaryngology. Developing these quality measures is imperative to provide the highest quality of care for patients with head and neck neoplasia and to ensure that the Society defines appropriate standards.

Thus, in 2005 under the leadership of then President Randal S. Weber, the American Head and Neck Society formed an ad hoc committee on Quality of Care whose charge was to develop evidence-based quality of care measures for patients with head and neck neoplasia. Developing these quality measures was viewed as imperative to providing the highest quality of care for our patients and to ensure that the Society provides leadership in defining appropriate standards of care in an era of value-based purchasing.

**Steps for developing this quality of care measures included:**

1. identifying a neoplastic disease of high prevalence in the head and neck surgery practice.
2. identifying common measurable treatment practices during the preoperative, course of treatment, and post-treatment periods.
3. performing literature reviews to identify evidence for the measures from step 2.
4. proposing measures by which practitioners can evaluate their treatment practices

A multidisciplinary committee was formed and began work in the summer of 2006 by vetting disease sites for our foray into developing quality measures. After much discussion, the Committee decided to focus on oral cavity cancer as an initial undertaking. The group then divided into three working groups concentrating on pre-treatment, treatment, and post-treatment measures. An exhaustive literature search for high level of evidence was performed and then quality measures were developed from this search. The committee discussed the different measures that emerged from this stage of the process, and agreed upon 2-3 measures for pre-treatment, treatment, and post-treatment care, respectively. The quality measures were developed by consensus, appropriately referenced, and submitted to the Executive Council of the American Head and Neck Society that approved them in December 2007.

**The pre-treatment evaluation quality parameters selected were:**

1. All oral tongue cancer patients require documentation of pathology utilizing CAP (College of American Pathologists) criteria with histopathologic confirmation of disease.
2. All oral tongue cancer patients require documentation of the appropriate TNM staging (as defined by the American Joint Committee on Cancer).
  - a. assessment of primary tumor size (T)
  - b. assessment of regional nodal basins for metastatic lymphadenopathy (N)
  - c. assessment for systemic disease (M)

This should include documentation of a complete head and neck examination, appropriate radiologic imaging of the head and neck, and chest x-ray.

3. Tobacco cessation counseling

**The treatment related quality measures are:**

1. All oral cavity cancer patients with advanced T stage or metastatic lymph nodes should be referred to radiation oncology for consideration of post-operative radiotherapy.
2. All oral cavity cancer patients with positive pathologic margins or metastatic lymph nodes showing extracapsular extension should be referred to a medical oncologist and radiation oncologist for consideration for adjuvant chemotherapy and radiation.

**The quality measures for post-treatment surveillance are:**

1. All patients treated for oral cavity cancer should have follow-up visits for symptom management and surveillance for recurrence and second primary tumors.
2. Patients treated with radiation therapy to the neck should have assessment of serum TSH level in order to detect hypothyroidism. A post treatment serum TSH should be checked within 12 months of completing radiotherapy (and yearly thereafter?).

After completing the oral cavity quality measures, the committee then embarked on developing quality measures for laryngeal cancer. Again, the committee was divided into subgroups, an exhaustive and comprehensive literature review was performed, and measures were written. These were submitted to the Executive Council of the American Head and Neck Society and were approved in November 2009.

**The pretreatment evaluation quality of care parameters is:**

1. All laryngeal cancer patients require confirmatory biopsy and documentation of pathology using College of American Pathologists criteria with histopathologic confirmation of disease.
2. All laryngeal cancer patients require documentation of the appropriate TNM staging (as defined by the American Joint Committee on Cancer)<sup>1</sup>.
  - a. Assessment of primary tumor size (T);
    - i. T1-T4 by laryngeal exam AND
    - ii. T2-T4 via appropriate radiologic studies;
  - b. Assessment of regional nodal basins for metastatic lymphadenopathy (N); Assessment for systemic disease (M); This should include documentation of a complete head and neck exam<sup>2</sup>, appropriate radiographic imaging of the head and neck<sup>2-6</sup>, and chest x-ray<sup>7, 8</sup>.
  - c. Tobacco cessation counseling<sup>9-12</sup>
3. Pre-laryngectomy Counseling for patients undergoing laryngectomy

**The treatment-related quality of care measures are:**

1. All laryngeal cancer patients with advanced T stage or metastatic lymph nodes should undergo multidisciplinary evaluation either through consultation to radiation and/or medical oncologists or through the venue of a multidisciplinary tumor board
2. All postoperative laryngeal cancer patients with more than one positive lymph node and/or advanced T stage should be referred to radiation oncology for consideration of radiation therapy.
3. All postoperative laryngeal cancer patients with positive pathologic margins or metastatic lymph nodes showing extracapsular extension should be referred to a medical oncologist and radiation oncologist for consideration for adjuvant chemotherapy and radiation.

All patients who undergo a laryngeal surgery (partial or total) should be evaluated and followed by a speech pathologist.

**The post-treatment surveillance quality of care measures is:**

1. All patients treated for laryngeal cancer should have regular follow-up visits to assess symptom management and surveillance via laryngeal exam and radiographic studies” for recurrence and second primary tumors.
2. Patients treated with radiation therapy to the neck should have assessment of serum thyroid stimulating hormone level to detect hypothyroidism. Posttreatment serum thyroid stimulating hormone levels should be checked within 12 months of completing radiotherapy (and yearly thereafter?).

In summary, the American Head and Neck Society have been instrumental in developing quality measures for two primary cancers (oral cavity and larynx). We anticipate that adherence to these quality measures will be imperative and will raise the quality of care for all of our patients.

