

Invited Commentary

Delivering Timely Head and Neck Cancer Care to an Underserved Urban Population—Better Late Than Never, but Never Late Is Better

Evan M. Graboyes, MD; Chanita Hughes-Halbert, PhD

Despite aggressive multimodal therapy consisting of combinations of surgery, radiotherapy, and chemotherapy, patients with locally advanced head and neck squamous cell carcinoma (HNSCC) have a poor prognosis, with 5-year survival rates hovering around 50%. This suboptimal survival



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is even worse for racial/ethnic minorities and underinsured patients with HNSCC, who experience significantly higher rates of mortality relative to their white and well-insured peers.^{1,2} Therefore, HNSCC is a cancer for which strategies to improve survival and equity are desperately needed. In light of this need, it is becoming abundantly clear that the manner in which we deliver cancer care to patients with HNSCC has significant potential as a modifiable target to drive improvements in survival and decrease disparities in outcomes.³ Delays in cancer care delivery across the continuum contribute to excess mortality for patients with HNSCC, disproportionately burden racial/ethnic minorities and underinsured patients, and are a key contributor to disparities in survival for racial/ethnic minority and underinsured populations.³⁻⁵

Against this background, the article by Liao et al⁶ in this issue of *JAMA Otolaryngology-Head & Neck Surgery* reverberates as a renewed call to understand the complicated system of care delivery for patients with HNSCC and how it continues to fail our most vulnerable patients. By supplementing the existing body of evidence that delays in HNSCC care are key drivers of excess mortality and disparities in outcomes, their findings add to the growing clarion call to recognize the devastating oncologic consequences of treatment delays in HNSCC. The retrospective cohort study by Liao et al⁶ of 956 patients with HNSCC treated over 14 years at a single academic medical center primarily serving an urban, medically underserved population yields 3 critically important results. First, initiation of treatment beyond 60 days after diagnosis is associated with worse survival (adjusted hazard ratio, 1.69; 95% CI, 1.32-2.18) and a higher risk of recurrence (adjusted odds ratio, 1.77; 95% CI, 1.07-2.93) after adjustment for relevant covariates. Second, key variables are independently associated with delayed treatment initiation, including fragmentation of care between diagnosis and treatment facilities, African American race, and Medicaid insurance. Third, the most common reasons for delayed treatment are missed appointments, extensive pretreatment evaluation, and treatment refusal.

Despite the centrality that timeliness plays in the delivery of high-quality cancer care, definitions of delay have been inconsistent in prior studies analyzing time to treatment initiation for patients with HNSCC.³ Therefore, it is notable that the optimal time to treatment initiation threshold of 60 days

identified by Liao et al⁶ is concordant with the definition of treatment delay derived by Murphy et al⁷ using data from the National Cancer Database. As such, the data presented herein by Liao et al⁶ add independent confirmation that delays beyond (approximately) 60 days from diagnosis to treatment initiation are oncologically relevant for patients with HNSCC.^{6,7} It is intuitively obvious that faster initiation of treatment is not always better; coordinating high-quality multidisciplinary cancer care takes time. The challenge, of course, is determining how long is too long at both the individual patient and population levels.

The identification by Liao et al⁶ that missed appointments, extensive pretreatment evaluation, and treatment refusal are the 3 most common reasons for treatment delay is key to advancing our understanding of HNSCC care delivery. However, significant additional work is needed to understand these reasons in detail, particularly vis-à-vis this high-risk population. When a pretreatment evaluation may consist of appointments with an ablative surgeon, reconstructive surgeon, radiation oncologist, medical oncologist, speech-language pathologist, dentist, oral surgeon, and anesthesiologist (in addition to staging imaging procedures and/or radiology-guided biopsies), the interplay of “missed appointments” and “extensive pretreatment evaluation” becomes apparent. Is an appointment missed because the patient did not understand the reason that he/she needed to attend the seventh pretreatment appointment in the preoperative anesthesia clinic, which would require a third separate visit? Is it because the patient’s friend who was going to provide a ride canceled at the last minute and there was insufficient time to reserve a Medicaid shuttle? Is it because the patient is scared and in denial? Although all scenarios may result in a missed appointment, they have vastly different underlying barriers (and presumably different solutions). In addition, the finding by Liao et al⁶ that treatment refusal was the third most common reason for treatment delay calls for further scientific investigation. What role do culture, mistrust, and fear play in treatment refusal, particularly for African American and Hispanic patients cared for by predominantly white, non-Hispanic health care providers? Identifying reasons for and causes of treatment delay from retrospectively collected electronic medical record data is fraught with limitations and caveats. Therefore, although these data should be interpreted with caution, they are novel, hypothesis generating, and critically important for future research.

The findings by Liao et al⁶ add to and extend our knowledge about treatment delays in HNSCC in a multitude of ways. However, prior publications have already consistently demonstrated that treatment delays across the HNSCC care continuum are common, disproportionately burden racial/ethnic minorities and underinsured patients, and contribute

to high mortality and disparities in survival.¹⁻⁵ It is imperative that the science move beyond continuing to characterize the frequency and oncologic consequences of treatment delays and instead focus on identifying and understanding the barriers to timely care at the patient, health care provider, and system level so that we may develop and test novel interventions specifically targeted to these barriers. This is no easy task. Liao et al⁶ should be congratulated for identifying the need to understand why delays were happening in their patient population, thereby taking the first small step toward developing an intervention to address these delays. Others have similarly ventured beyond characterizing treatment delay within HNSCC to barrier identification and intervention development and testing. An example

is the work by Divi et al⁸ that showed reduction in the rate of delay to starting adjuvant therapy after surgery for oral cavity cancer from 38% to 27% using quality improvement methods to identify and address key drivers of delay.

As clinicians caring for patients with HNSCC, it is better late than never that we grasp the consequences of timely care. The evidence that treatment delays are common, disproportionately burden racial/ethnic minorities and underinsured patients, and contribute to high mortality and disparities in survival is there for us to see. Now is the time to continue the work by Liao et al⁶ and others, move beyond recapitulating the problem, begin to have a deeper understanding of the root causes, and design and test interventions based on hypothesized solutions.

ARTICLE INFORMATION

Author Affiliations: Department of Otolaryngology–Head & Neck Surgery, Medical University of South Carolina, Charleston (Graboyes); Hollings Cancer Center, Medical University of South Carolina, Charleston (Graboyes, Hughes-Halbert); Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina, Charleston (Hughes-Halbert).

Corresponding Author: Evan M. Graboyes, MD, Department of Otolaryngology–Head & Neck Surgery, Medical University of South Carolina, 135 Rutledge Ave, MSC 550, Charleston, SC 29425 (graboyes@musc.edu).

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