ASSOCIATION OF CANCER CARE CENTERS

MULTIDISCIPLINARY APPROACHES TO HEAD AND NECK CANCER CARE

LANDSCAPE ANALYSIS



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EXECUTIVE SUMMARY

This landscape analysis has been prepared to provide an overview of the clinical treatment offered for patients with head and neck cancer and to outline barriers to effective multimodal care coordination in various community settings. The treatment of head and neck cancer requires collaboration across members of the multidisciplinary cancer care team and access to services that may not be available in remote areas.

In connection with its education program, *Multidisciplinary Approaches to Head and Neck Cancer Care*—in partnership with the Head and Neck Cancer Alliance and the American Society for Radiation Oncology (ASTRO), and with support by EMD Serono—the Association of Cancer Care Centers (ACCC) reviewed literature and data from previous projects to outline some of the key challenges that affect the treatment of head and neck cancer.

Key issues that were identified include challenges regarding incorporating and coordinating effective multidisciplinary care models, addressing breakdowns in communication and coordination across members of the cancer care team, inadequate patient navigation and psychosocial support as they go through their treatment journey, lack of supportive resources for patients and their caregivers, and healthcare disparities.

Recent advances in treatment are improving outcomes for patients with head and neck cancer, but they must have access to these therapies and coordinated care before, during, and after treatment. As cancer programs face staffing shortages and clinician burnout, it remains critical to find and establish more effective ways for cancer programs to provide high-quality care for patients with head and neck cancer and to equip multidisciplinary cancer care teams with the necessary resources and education.

INTRODUCTION

As of 2023, an estimated 66,920 people (49,190 men and 17,730 women) in the US have been diagnosed with head and neck cancer.¹ This accounts for about 4% of all cancers in the US. The 5 major types of head and neck cancer include²:

- 1. Laryngeal and hypopharyngeal cancer
- 2. Nasal cavity and paranasal sinus cancer
- 3. Nasopharyngeal cancer
- 4. Oral and oropharyngeal cancer
- 5. Salivary gland cancer

Patients who receive treatment for locally advanced head and neck cancer often receive multimodal treatment that may include surgery, radiation therapy, and/or medications. While numerous advances in head and neck cancer treatment have been made in recent years, barriers to comprehensive care remain a challenge in the community, especially when a multidisciplinary team model is not employed to deliver care.³ Coordination among members of the multidisciplinary team is required to ensure timely and appropriate diagnosis, treatment, and post-treatment care (eg, reconstructive surgery or regaining swallowing). Outcomes are improved when patients receive care from high-volume centers, but many patients do not live near such facilities.⁴ Therefore, it remains essential for local community cancer programs to optimize their care delivery for patients with head and neck cancer.

The treatment of head and neck cancer is further complicated by the fact that patients may experience shame and embarrassment due to factors such as self-blame, disfigurement, speech impairments, dry mouth, and difficulty swallowing.⁵ The stigma and psychological trauma that patients experience also may place an additional burden on caregivers who face demanding tasks as they assist with a patient's daily activities, manage their medical appointments, and provide them with emotional support.⁶

RECENT ADVANCES IN TREATMENT

In recent years, significant advancements have been made in the treatment of certain subtypes of head and neck cancer. In 2023, the journal *Cancer* featured head and neck cancer as a specialty that has made some of the "top advances of the year" and highlighted 2 key areas of promising research?

- 1. De-escalation of therapeutics for human papillomavirus (HPV)-related oropharyngeal squamous cell carcinoma to reduce treatment-related toxicity (examples include immunotherapy with lower doses of radiation, induction followed by reduced-dose adjuvant radiation, etc)
- 2. Use of immunotherapy for recurrent/metastatic head and neck cancer (examples include neoadjuvant/adjuvant trials and combination anti-PD-L1/anti-CTLA-4 studies)

Given that radiotherapy is a key treatment modality for locally advanced head and neck cancer, treatment-related toxicities can be significant. New technology and imaging techniques, such as proton therapy and magnetic resonance imaging, are being integrated into radiotherapy treatment to minimize radiation impact outside of target areas.⁸ Other areas of active research include gene therapy, prevention studies with vaccines, and combination regimens.⁹

As of Sept 1, 2023, the following immune checkpoint inhibitors have been approved by the FDA for the treatment of recurrent/metastatic head and neck cancer^{10, 11}:

Pembrolizumab (KEYTRUDA)	Head and Neck Squamous Cell Cancer (HNSCC) In combination with platinum and FU for the first-line treatment of patients with metastatic or with unresectable, recurrent HNSCC. (1.3)							
	 As a single agent for the first-line treatment of patients with metastatic or with unresectable, recurrent HNSCC whose tumors express PD-L1 [Combined Positive Score (CPS) ≥1] as determined by an FDA-approved test. (1.3, 2.1) 							
	 As a single agent for the treatment of patients with recurrent or metastatic HNSCC with disease progression on or after platinum-containing chemotherapy. (1.3) 							
Nivolumab (OPDIVO)	Squamous Cell Carcinoma of Head and Neck (SCCHN) • Adult patients with recurrent or metastatic squamous cell carcinoma of the head and neck with disease progression on or after a platinum-based therapy. (1.8)							

Since 2019, no new immunotherapy drugs or regimens have been approved by the FDA for non-metastatic head and neck cancer. Current FDA approvals are only for patients who have recurrent or known metastatic squamous cell cancer of the head and neck.

Beyond immunotherapy, other agents like xevinapant are being studied in patients with locally advanced head and neck cancer. Xevinapant is a potent oral oncolytic agent that targets inhibitors of apoptosis proteins (IAPs) and regulates programmed cell death. In a recent phase 2 study involving patients with locally advanced squamous cell head and neck cancer, xevinapant plus chemoradiotherapy showed a 67% reduction in death or disease compared with placebo plus chemoradiotherapy. In IAPs are highly effective as radiosensitizers and some studies are also exploring their use with immunotherapy. Current phase 3 studies with xevinapant

include the TrilynX study (NCT04459715; unresected, locally advanced head and neck cancer) and the XRay Vision study (NCT05386550; resected, locally advanced head and neck cancer at high risk for recurrence).¹⁵

As research continues to explore how IAPs may impact the care of patients with locally advanced head and neck cancer, cancer programs in the community ought to:

- · Identify patients who may be eligible for clinical trials
- Anticipate how treatment plans may change if these agents become available
- Provide ongoing education as new data emerges

COORDINATING MULTIDISCIPLINARY CARE

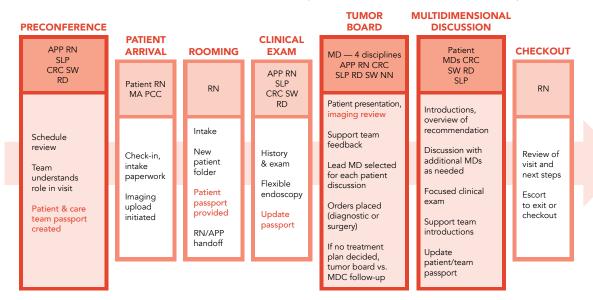
Multidisciplinary care models are essential for providing comprehensive and effective treatment for patients with head and neck cancer. These models involve collaboration and coordination among various health care professionals to address the complex medical, psychological, and support needs of patients.

A multidisciplinary clinic model can involve streamlining medical, surgical, and radiation appointments into a single day so that multiple specialists can give coordinated, multimodal care.¹⁶

The following is an example of a co-located multidisciplinary clinic model new patient clinic flow at Emory Healthcare, where all first-time patients are seen during the same initial visit by surgical oncology, radiation oncology, medical oncology, and ancillary providers; this is followed by tumor board discussion and neuroradiology review.¹⁷

Schema of New Clinic Flow

Schema of new clinic flow at Emory, from left to right, spanning the steps for preconference, patient arrival, rooming, clinical examination, tumor board, multidisciplinary discussion, and checkout, is presented.



APP = advanced practice provider, CRC = clinical research coordinator, MA = medical assistant, MD = medical doctor, MDC = multidisciplinary clinic, NN = nurse navigator, PCC = primary care clinician, RD = radiologist, RN = registered nurse, SLP = speech language pathologist, SW = social worker.

Source: Emory Healthcare

NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

Image source: https://catalyst.nejm.org/cms/asset/078a8899-7e49-46a1-9dfa-653361880b34/cat.22.0235-f1.jpg

Multidisciplinary clinic models for head and neck cancer can result in fewer treatment delays and more timely access to speech and audiology clinicians. 18 However, establishing a multidisciplinary clinic model may not always be feasible, especially in community settings where specialists may be located in different buildings or may not have coordinated clinic schedules. Staffing shortages also may prevent patients from receiving timely access to specialists.

Some of the other barriers to effective multidisciplinary care include the following:

Makeup of the Care Team

Many community cancer programs offer surgery, radiation, and medical oncology services. However, the treatment team for head and neck cancer should include other groups such as dentists and audiologists, although some community cancer programs may not have established formal relationships with such groups or they may face workforce shortages.¹⁹ The NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Head and Neck Cancers has provided guidelines on the composition of the multidisciplinary care team, and the following has been reproduced with permission from the NCCN.20

NCCN Guidelines Version 1.2024 Team Approach

MULTIDISCIPLINARY TEAM

The comprehensive care of patients with head and neck cancers is complex. All patients need access to the full range of support services and specialists with expertise in the comprehensive care of patients with head and neck cancer for optimal treatment and follow-up. Outcomes are improved when patients with head and neck cancers are treated in high-volume centers.

- · Head and neck surgery
- Radiation oncology
- Medical oncology
- Plastic and reconstructive surgery
- Specialized nursing care
- Dentistry/prosthodontics
 Physical medicine and rehabilitation
- (including therapy for lymphedema of the neck)
- Speech and swallowing therapy
- Clinical social work
- Clinical nutrition

- Pathology (including cytopathology)
- Diagnostic and interventional radiology
- Adjunctive services
- Neurosurgery→ Ophthalmology
- ▶ Psychiatry
- ▶ Addiction services
- **▶** Audiology
- ▶ Palliative care
- ▶ Pain management

SUPPORT SERVICES

Follow-up should be performed by a physician and other health care professionals with expertise in the comprehensive care and prevention of treatment sequelae. It should include a comprehensive head and neck exam. The comprehensive care of patients with head and neck cancer may involve the following:

- · General medical care
- Pain and symptom management (NCCN Guidelines for Adult Cancer Pain)
- Nutritional support
- ▶ Enteral feeding
- Oral nutrition
- · Dental care for RT effects
- Xerostomia management
- Smoking and alcohol cessation (NCCN Guidelines for Smoking Cessation)
- Speech and swallowing therapy

- Audiology
- Tracheotomy care
- Wound management
- Depression assessment and management (NCCN Guidelines for Distress Management)
- Social work and case management
- Care coordination
- Supportive care
- (NCCN Guidelines for Palliative Care)
- Physical therapy (lymphedema management)

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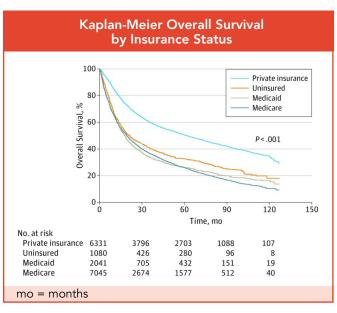
Breakdowns in Communication and Care Coordination

Ineffective communication may occur when clinicians discuss treatment options and goals of care with patients.²¹ Studies have shown that care that is provided by a dedicated team that meets regularly for tumor boards results in improved survival for patients with head and neck cancer.²² If teams are not meeting regularly to discuss patient cases and coordinate care plans, then gaps may occur around treatment scheduling or around preoperative and postoperative evaluations and therapy.²³ Also, some clinicians may feel reluctant to refer patients for psychological services due to lack of access or perceived stigma associated with mental illness.²⁴

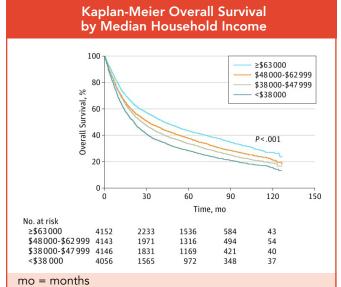
Inadequate Health Insurance Coverage

Many patients with cancer lack insurance or are underinsured.²⁵ Compared with privately insured patients, Medicaid-insured and uninsured patients were significantly more likely to be diagnosed with late-stage (III/IV) cancer for all stageable cancers.²⁶ Patients with squamous cell carcinoma of the pharynx who lack private insurance or who have lower household income may experience delays in diagnosis and treatment.²⁷

While many community cancer programs offer charity care and find ways to utilize patient assistance programs, such efforts often require coordinated efforts with financial advocates and social workers. Some healthcare providers, especially in behavioral health, do not take insurance or are out-of-network providers.²⁸







Lack of Patient Navigation and Support for Patients and Caregivers

Community cancer programs may not have dedicated nurse navigators who can work closely with patients with head and neck cancer to identify and address critical needs such as transportation to appointments, obtaining prescriptions, help with tube feeding, and more.²⁹ Caregivers also face unmet needs, especially as patients move through diagnosis, treatment, and follow-up care.³⁰ The significant time commitments required from caregivers may lead to fatigue

and burnout.³¹ Clinicians often overlook caregiver burden and may miss opportunities to recommend interventions and support designed to benefit patients and caregivers.

In a blog post featured in ASCO Connection, Abdul-Rahman Jazieh, MD, MPH, suggests some approaches to provide care for caregivers³³:

- Document "caregiver care" in the clinical management plan
- Identify relevant resources to support caregivers
- Improve communication with caregivers

ADDRESSING PSYCHOSOCIAL NEEDS OF PATIENTS AND CAREGIVERS

Patients with head and neck cancer often face significant emotional and psychological distress due to visible changes in appearance, communication difficulties, and treatment-related adverse effects. Typical distress screening questionnaires used in many cancer programs may not be specific enough to identify distress among patients with unique head and neck symptoms.³⁴

By using more tailored psychosocial distress screening protocols, cancer clinicians may better identify and address distress that might otherwise go unrecognized.³⁵ The sample questionnaire below from the University of California, Los Angeles (UCLA) combines the Distress Thermometer with other specific questions about head and neck symptoms.

HNCP DISTRESS S	CREENER FOR	PATIENT	ΓS								
Instructions: First please circle the number (0-10) that best describes		<u>Second</u> , please indicate if any of the following has been a problem for you in the <u>PAST WEEK</u> including today. Be sure to check YES or NO for each.									
how much distress you have been experiencing in the PAST WEEK including today.				Practical Problems Child Care Housing Insurance/Financial Transportation		Yes	No	Appearance Breathing Eating Changes in Swallowing			
Extreme distress	9 8 7 6 5 4			Work/School Freatment Decisions Family Problems Dealing with Children Dealing with Partner Ability to Have Children Family Health Issues Solation/Loneliness Lack of Support		000000000	000000000	Constipa Fatigue Getting	/Concentration		
	2			piritual/Religious Concerns				Substand	ce Abuse		
No distress	No distress			Over the <u>LAST TWO WEEKS</u> how often have you been bothered by the following problems? (Use ✓ to indicate your answer)				Several Days	More Than Half the Days	Nearly Every Day	
	1. Feeling	1. Feeling nervous, anxious or on edge.					□ 1	□ 2	□ 3		
		2. Not being able to stop or control worrying.					□ 1	□ 2	□ 3		
	3. Little interest or pleasure in doing things.				□ 0		□ 1	□ 2	□ 3		
		4. Feeling	g dow	n, depressed, or hopeless.		□ 0		□ 1	□ 2	□ 3	
atient or Representa	Da	Interpreter Signature:ID #									

Image source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9875715/

The following are several strategies that may address some of the unique psychosocial needs of patients and caregivers to:

Support Groups and Counseling

Support groups and individual counseling sessions can provide a safe space for patients and caregivers to share their experiences, express emotions, and receive emotional support from peers and professionals.³⁶ Studies examining patient-caregiver dyads have shown that the emotional distress experienced by patients with head and neck cancer and their caregivers are often interconnected, but patients often receive more psychological support than their caregivers.³⁷

Patient and Caregiver Education and Resources

Education can be delivered in ways to empower patients and help them engage in shared decision-making conversations about treatment options and potential adverse effects. Patients and caregivers can also learn coping strategies and other techniques for handling emotional distress.³⁸

Speech and Swallowing Therapy

Speech therapists play a crucial role in helping patients regain their communication and swallowing abilities post treatment, prompting improvement in their quality of life and social interactions.³⁹ Providing patients with tools and techniques to enhance communication may help them engage in social interactions and express themselves more effectively.

Body Image and Self-Esteem Workshops

A person's face is a key component of personality, self-image, and interpersonal relationships. 40 Because patients often experience disfigurement, specialized workshops addressing body-image issues and self-esteem challenges may help patients cope with changes in appearance and aid them in fostering a healthier self-image. 41

Mindfulness and Relaxation Techniques

Incorporating mindfulness, meditation, and relaxation techniques into the care plan can help patients manage stress, anxiety, and treatment-related discomfort.⁴² Additional integrative interventions such as visualization and progressive muscle relaxation may increase quality of life for patients with head and neck cancer by further reducing psychological distress.⁴³

Collaboration with Mental Health Professionals

Psychologists and psychiatrists can offer specialized interventions for managing patients' anxiety, depression, and adjustment difficulties, which can enhance their emotional well-being. Both patients with head and neck cancer and their caregivers may need to access professional counseling services to address emotional distress.

POST-TREATMENT CARE

Post-treatment rehabilitation and survivorship care play critical roles in the comprehensive management of patients with head and neck cancer. After completing treatments such as surgery, radiation, and chemotherapy, patients often face challenges related to physical function, communication, and psychosocial well-being. Tailored rehabilitation and survivorship programs aim to improve quality of life and address the potential effects of treatment.

Examples of post-treatment care for head and neck cancer include:

- Speech and swallowing therapy
- Dental and oral health
- Lymphedema management
- Psychosocial support
- Nutritional guidance
- Managing secondary effects of treatment

HEALTHCARE DISPARITIES

Racial disparities among patients with head and neck cancer have been studied extensively, particularly the inequities between Black and White patients receiving care in the US. 46 Even when compared to other racial and ethnic minority groups, Black patients had significantly worse outcomes. 47 Socioeconomic determinants such as insurance status play a critical role in racial disparity, but issues such as genetic and epigenetic differences are also thought to contribute to differences in survival outcomes. 48 A meta-analysis evaluating treatment outcomes among patients with head and neck cancer who were enrolled in clinical trials found that Black participants were consistently more likely to have

worse progression-free survival or disease-free survival when compared with White patients. ⁴⁹ Interestingly, a recent study from the Veterans Health Administration (VHA) found that Black patients with laryngeal squamous cell carcinoma had tumor burden at diagnosis and survival outcomes comparable to those of White patients, which was counter to national trends. ⁵⁰ The VHA findings suggest that socioeconomic factors, notably access to care, are principal among etiologies behind racial disparities in larynx cancer outcomes. Researchers have noted that future research needs to explore community and societal factors that may explain some of these disparities. ⁵¹

CONCLUSION

As ongoing advances occur in head and neck cancer treatment, clinicians in the community must work together to establish effective multidisciplinary models of care. Cancer programs must prioritize their efforts based on their staffing resources and capabilities to find ways to address some of the unique needs of patients with head and neck cancer and their caregivers.

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