AAVBC

AMERICAN ACADEMY OF VALUE BASED CARE

Esophageal Cancer

Quick Reference Guide

2026

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1 CLINICAL SNAPSHOT

Definition: Esophageal cancer is an epithelial malignancy of the esophagus comprising **two distinct histologic entities — esophageal squamous cell carcinoma (ESCC) and esophageal adenocarcinoma (EAC)** — that share an anatomic site but differ in risk factors, location, staging criteria, and treatment.[1] EAC predominates in the United States and arises in the **distal esophagus and gastroesophageal junction** (GEJ) from Barrett's esophagus driven by chronic GERD, obesity, male sex, and age >50.[1] ESCC arises in the **upper and middle esophagus** and is driven by tobacco, alcohol (synergistic), and prior head/neck squamous cell carcinoma.[1] The AJCC 8th Edition uses separate stage groupings for ESCC and EAC because survival patterns diverge by histology.[2]

ICD-10 Codes:

Primary tumor: **C15.3** (upper third, ESCC predominates), **C15.4** (middle third, ESCC predominates; airway invasion risk), **C15.5** (lower third, EAC predominates; biomarker testing drives treatment), **C15.8** (overlapping subsites — assign when the tumor spans two thirds), **C15.9** (unspecified — avoid when endoscopy specifies location). Precursor lesions: **K22.70** (Barrett's esophagus without dysplasia), **K22.710** (Barrett's with low-grade dysplasia), **K22.711** (Barrett's with high-grade dysplasia). Metastatic sites are coded separately: **C78.7** (liver), **C78.89** (other digestive), **C78.00** (lung), **C79.51** (bone), **C79.31** (brain).[3]

Prevalence and Burden: An estimated **22,530 new cases and 16,290 deaths** are projected in the United States in 2026, with a mean age at diagnosis of 69 years and a **5-year relative survival** of approximately **22%**.[4,5] The **late-stage diagnostic pattern** — driven by attribution of dysphagia, heartburn, hoarseness, and mild odynophagia to benign GERD or vocal cord dysfunction— explains the survival gap.[1] Up to **40%** of patients with EAC lack classic GERD symptoms, making dysphagia the dominant alarm symptom that must trigger EGD rather than PPI escalation.[6]

HCC/RAF V28 Mapping

ICD-10 CODE(S)	HCC CATEGORY (V28)	RAF (CNA)	DOCUMENTATION REQUIREMENT
C15.3–C15.5 (subsite specified)	HCC 20 — Lung and Other Severe Cancers	1.136	Specify anatomic subsite from endoscopy or imaging — location relative to incisors and GEJ should always support C15.3 (upper), C15.4 (middle), or C15.5 (lower)
C15.8 (overlapping sites)	HCC 20 — Lung and Other Severe Cancers	1.136	Tumor spans two or more subsites — assign when documented from imaging; do not default to the subsite with tumor bulk
C15.9 (unspecified — avoid)	HCC 20 — Lung and Other Severe Cancers	1.136	TRAP: Endoscopy reports almost always specify location relative to incisors and GEJ — use C15.3/C15.4/C15.5 whenever location is documented

ICD-10 CODE(S)	HCC CATEGORY (V28)	RAF (CNA)	DOCUMENTATION REQUIREMENT
C78.7 (liver mets)	HCC 17 — Metastatic Cancer (liver, lung)	4.209	Code separately from C15.x when liver metastases are confirmed — document 'liver metastases from esophageal primary'
C78.89 (Secondary malignant neoplasm of other digestive organs)	HCC 18	2.341	Each distant site coded individually — captures clinical complexity and supports continuity
K22.70 (Barrett's esophagus without dysplasia)/ K22.710 (Barrett's esophagus with low grade dysplasia)/ K22.711 (Barrett's esophagus with high grade dysplasia)	No HCC	—	Barrett's esophagus — document dysplasia grade (none, low, high); drives surveillance interval and EET referral
Z85.09 (Personal history of malignant neoplasm of other digestive organs — *avoid for active disease)*	No HCC	—	AVOID: Personal history — use only after treatment completion with no active disease and no active surveillance for known disease

ABBREVIATIONS: CMS-HCC V28 = Centers for Medicare & Medicaid Services Hierarchical Condition Category Model V28; CNA = Community Non-Dual Eligible, Aged; EAC = esophageal adenocarcinoma; ESCC = esophageal squamous cell carcinoma; EET = endoscopic eradication therapy; GEJ = gastroesophageal junction; HCC = Hierarchical Condition Category; RAF = Risk Adjustment Factor. *Illustrative annual value at 2024 CMS-HCC base rate × CNA RAF coefficient RAF coefficients, HCC mapping, and base rate per CMS CY2026 sources

RAF values represent the Community Non-Dual Eligible Aged (CNA) coefficient from the 2026 CMS-HCC model; values vary across patient populations based on eligibility and care setting

Risk-Adjusted Care Resources per Patient/Year

RAF weight × MA base rate = estimated annual care coordination support per documented HCC

Esophageal Cancer(Specified/ Unspecified)

~$11,800

HCC 20 · RAF 1.136 · per active patient/year

Esophageal Cancer (Metastatic Cancer (liver, lung))

~$43,700

HCC 17 · RAF 4.209 · per active patient/year

RAF values represent the Community Non-Dual Eligible Aged (CNA) coefficient from the 2026 CMS-HCC model; values vary across patient populations based on eligibility and care setting

RAF coefficients are CNA segment, 2026 CMS-HCC Model V28. The impact of this condition varies across patient populations, particularly in individuals with disability, dual eligibility, or those receiving care in institutional settings.

2 RECOGNITION AND DIAGNOSIS

Medicare Diagnostic Workup

TEST	COVERAGE	FREQUENCY	CPT/ HCPCS	CLINICAL INDICATION
No population-based screening for esophageal cancer[8]	—	—	—	**No average-risk screening recommendation exist**s; PCP risk-stratification + symptom-triggered EGD replaces population screening
One-time EGD for Barrett's screening — chronic GERD plus ≥3 risk factors[9]	Medicare Part B covered when medically necessary	Once at qualifying threshold; repeat per Barrett's surveillance interval if BE found	43235/ 43239	ACG 2022/AGA 2025 threshold: **chronic GERD + ≥3 of male sex, age >50, White race, tobacco, obesity (BMI ≥30), family history of BE/EAC**
EGD with biopsy — diagnostic	Medicare Part B covered when indicated	Within 2 weeks of any progressive dysphagia in patients ≥50	43239	Dysphagia, persistent GERD refractory to **8 weeks of PPI** in higher-risk patients, hoarseness with esophageal risk factors, weight loss + odynophagia — EGD, **NOT** barium swallow[8]
Barrett's surveillance EGD (no dysplasia)	Medicare Part B covered when indicated	Every 3–5 years: Short-segment BE (<3 cm): Every 5 years. Long-segment BE (3 cm to 10 cm)	43239	Cessation may be appropriate ages 70–80 **based on comorbidity**[9]
Barrett's surveillance EGD (low-grade dysplasia)[9]	Medicare Part B covered when indicated	Annual	43239	**Annual surveillance**; refer to EET center if progression suspected

TEST	COVERAGE	FREQUENCY	CPT/ HCPCS	CLINICAL INDICATION
Barrett's surveillance EGD (high-grade dysplasia)[9]	Medicare Part B covered	Expedited (within weeks)	43239	**High progression risk**; expedited EET referral
PET/CT — staging[8]	Medicare Part B covered when medically necessary	Once at staging; restaging per oncology	78815	**REQUIRED before any surgical planning** to identify distant metastases that CT alone may miss — preventing unnecessary esophagectomy in under-staged patients
Contrast CT chest/abdomen[8]	Medicare Part B covered	Once at staging	71260/ 74170	Initial **cross-sectional staging**; complementary to PET/CT and EUS
EUS — locoregional staging[8]	Medicare Part B covered	Once at staging	43237/ 43242	**Most accurate T- and N-staging**; biopsy of suspicious nodes
Advance Care Planning (AWV)[10]	Medicare Part B; no copay during AWV	Annually + when goals change	99497/ 99498	Document **directives, surrogate, code status** — relevant when functional status shapes curative-versus-palliative decisions

ABBREVIATIONS: ACG = American College of Gastroenterology; AGA = American Gastroenterological Association; AWV = Annual Wellness Visit; BE = Barrett's esophagus; EAC = esophageal adenocarcinoma; EET = endoscopic eradication therapy; EGD = esophagogastroduodenoscopy; EUS = endoscopic ultrasound; GEJ = gastroesophageal junction; GERD = gastroesophageal reflux disease; PCP = primary care provider; PET/CT = positron emission tomography/computed tomography; PPI = proton pump inhibitor

Subtle Early Signs in Older Adults (>65)

SIGNS	CLINICAL SIGNIFICANCE
Unintentional weight loss >5% in 6 months with mild odynophagia or dysphagia[11,12]	Frequently **misattributed** to deconditioning or polypharmacy in older adults; **combine with dysphagia** for expedited EGD
Intermittent or mild dysphagia to solids only — not yet progressive	**Early esophageal obstruction** may present **subtly** before the classic **solid-then-liquid** pattern emerges; isolated solid-food dysphagia in a patient ≥65 is not a benign finding

SIGNS	CLINICAL SIGNIFICANCE
No heartburn history in a patient presenting with dysphagia, weight loss, or unexplained iron deficiency anemia[13]	Absence of classic GERD symptoms **does not exclude** EAC — dysphagia, weight loss, and anemia may be the only presenting features in up to 40% of patients

ABBREVIATIONS: EAC = esophageal adenocarcinoma; EGD = esophagogastroduodenoscopy; ENT = ear, nose, and throat; PPI = proton pump inhibitor; URI = upper respiratory infection

Geriatric Risk Factors

FACTOR	RISK SIGNAL	NOTES
Chronic GERD (≥5 years symptomatic)	Major EAC risk factor	Drives Barrett's esophagus → low-grade dysplasia → high-grade dysplasia → EAC progression pathway[13,14]
Barrett's esophagus without dysplasia	Annual progression to EAC ~0.1–0.5%[15]	**Surveillance EGD every 3–5 years**; consider cessation at ages 70–80 based on comorbidity[16]
Obesity (BMI ≥30)	OR 2.4–2.8 for EAC[12]	Central obesity particularly strong; **risk persists after weight loss**
Male sex	EAC M:F ratio 6–8:1[17]	**Strong demographic risk factor** — but female patients with alarm symptoms still warrant the same expedited workup
Age >50	Mean age at diagnosis 69 years[4]	Predominantly a Medicare-age disease
White race (for EAC)	Demographic risk factor[14]	EAC predominates in **non-Hispanic White populations**
Family history of Barrett's or EAC	Increases EAC risk[8,14]	**Family history** is one of the **≥3 risk factors** that prompts one-time Barrett's screening EGD
Tobacco use (current or remote)	OR ~2–5× for ESCC; meaningful EAC risk[14]	**Synergistic with alcohol** for ESCC

FACTOR	RISK SIGNAL	NOTES
Alcohol use disorder	OR 3–5× for ESCC[14]	**Synergistic with tobacco** for ESCC
Prior head/neck SCC	SIR 21.8 for ESCC[17]	Field cancerization effect; screen with EGD when **persistent dysphagia**
Achalasia	Elevated ESCC risk[14]	**Long-standing achalasia**; consider EGD with biopsy
Tylosis, Plummer-Vinson syndrome	Rare but markedly elevated ESCC risk[14]	**Begin surveillance per specialist guidance**

ABBREVIATIONS: BMI = body mass index; EAC = esophageal adenocarcinoma; EGD = esophagogastroduodenoscopy; ESCC = esophageal squamous cell carcinoma; GERD = gastroesophageal reflux disease; M:F = male-to-female; OR = odds ratio; SCC = squamous cell carcinoma; SIR = standardized incidence ratio

Diagnostic Thresholds

TEST/MARKER	DIAGNOSTIC CRITERION	NOTES
EGD with biopsy[8]	NCCN v2.2026 recommends **6–8 biopsies** of suspicious lesions[8]	**Only EGD with biopsy can confirm diagnosis**; barium swallow is NOT a substitute
PET/CT[8]	Required **before** any surgical planning	Identifies **distant metastases** CT alone may miss — preventing unnecessary esophagectomy in under-staged patients
Contrast CT chest/abdomen ± pelvis[8]	Initial cross-sectional staging	**Complementary** to PET/CT and EUS
EUS[8]	Most accurate T- and N-staging	Biopsy of **suspicious lymph nodes**; informs neoadjuvant vs. upfront surgical strategy
Bronchoscopy[18]	Indicated for upper/mid esophageal tumors abutting airway	**Excludes** airway invasion
Histology (ESCC vs. EAC)[2]	Must be documented for staging and treatment	AJCC 8th Edition uses separate stage groupings for ESCC and EAC; drives separate NCCN treatment algorithms

TEST/MARKER	DIAGNOSTIC CRITERION	NOTES
Biomarkers (EAC, advanced/ metastatic)[8]	HER2, PD-L1 CPS, MSI/MMR, CLDN18.2	**Drives first-line and subsequent therapy** decisions in advanced disease
Biomarkers (ESCC, advanced/ metastatic)[8]	PD-L1 CPS	**PD-L1** status informs checkpoint inhibitor selection in advanced ESCC
G-8 Geriatric Screening (≥65)[19]	**Score ≤14** triggers comprehensive geriatric assessment	G-8 informs treatment intensity — fit 80-year-olds may tolerate trimodality; frail 65-year-olds may not

ABBREVIATIONS: AJCC = American Joint Committee on Cancer; CLDN18.2 = claudin 18.2; CPS = combined positive score; EAC = esophageal adenocarcinoma; EGD = esophagogastroduodenoscopy; ESCC = esophageal squamous cell carcinoma; EUS = endoscopic ultrasound; G-8 = Geriatric 8 screening; HER2 = human epidermal growth factor receptor 2; MMR = mismatch repair; MSI = microsatellite instability; NCCN = National Comprehensive Cancer Network; PD-L1 = programmed death-ligand 1; PET/CT = positron emission tomography/computed tomography; SEER = Surveillance, Epidemiology, and End Results; TNM = tumor, node, metastasis

Cardinal Symptoms

CLINICAL CLUE	WHY IT MATTERS	NEXT DIAGNOSTIC STEP
Progressive dysphagia in any patient ≥50[20]	**Cardinal alarm symptom for esophageal malignancy**; PPI trial and barium swallow are **inadequate** substitutes for endoscopy[20]	EGD with biopsy within **2 weeks**
Persistent GERD refractory to 8 weeks of PPI in male ≥50 with risk factors[9]	Up to **40% of EAC patients lack classic GERD symptoms**;[6] refractoriness in higher-risk patients warrants endoscopy	EGD with biopsy and Barrett's screening
New hoarseness without URI in a Medicare-age patient[11]	Possible recurrent laryngeal nerve invasion from upper/mid esophageal tumor	ENT evaluation; EGD; consider PET/CT **if mass found**
Iron deficiency anemia of unclear etiology with esophageal cancer risk factors[21]	Chronic occult blood loss from luminal tumor	**EGD with biopsy**; colonoscopy if not recently completed
Known Barrett's esophagus — overdue for surveillance[22]	**Annual EAC progression risk persists**; surveillance interval is guideline-defined	Schedule surveillance EGD per dysplasia grade and AGA 2025 interval

CLINICAL CLUE	WHY IT MATTERS	NEXT DIAGNOSTIC STEP
Patient with prior head/neck SCC with new dysphagia	Field cancerization — markedly elevated ESCC risk (SIR 21.8)[17]	**EGD with biopsy**
Significant unintentional weight loss with subtle dysphagia or odynophagia[8]	**Combination** strongly suggests luminal pathology, including malignancy	**EGD with biopsy**; concurrent nutritional assessment and dietitian referral

ABBREVIATIONS: EAC = esophageal adenocarcinoma; EGD = esophagogastroduodenoscopy; ENT = ear, nose, and throat; ESCC = esophageal squamous cell carcinoma; GERD = gastroesophageal reflux disease; PET/CT = positron emission tomography/computed tomography; PPI = proton pump inhibitor; SCC = squamous cell carcinoma; SIR = standardized incidence ratio; URI = upper respiratory infection

Common Oversights

OVERSIGHT/SHORTCUT	WHY IT MATTERS — WHAT TO DO INSTEAD
Trialing PPI escalation for dysphagia	**Dysphagia is an alarm symptom, not a GERD severity marker.** Progressive dysphagia in any patient ≥50 requires **EGD within 2 weeks** — not continued empiric acid suppression[21]
Substituting barium swallow for EGD when malignancy is suspected[11,22]	Barium swallow lacks the sensitivity to rule out esophageal cancer and does not provide tissue diagnosis. NCCN v2.2026 recommends **6–8 biopsies at EGD**[8] **— barium swallow does not substitute**
Omitting histology (ESCC vs. EAC) from the clinical record[2]	AJCC 8th Edition uses **separate stage groupings** by histology; NCCN treatment algorithms diverge by histology. Histology must appear explicitly in the note
Skipping PET/CT before surgical planning[8]	**PET/CT identifies distant metastases that CT alone may miss.** Unnecessary esophagectomy in an under-staged patient is a preventable harm AAVBC specifically targets
Recommending esophagectomy by default for resectable disease[23]	For SCC patients **≥75 or with ≥2 comorbidities**, dCRT may achieve comparable OS with substantially lower morbidity. Treatment selection is by histology, stage, biomarker, and functional status — not age or default-surgery framing
Using chronologic age as the determinant of surgical candidacy	A fit 80-year-old may tolerate treatment similarly to a younger patient; a frail 65-year-old may not. **Use G-8, CGA, Fried Frailty Criteria, CARG, and Charlson Comorbidity Index** — not age alone[24]

OVERSIGHT/SHORTCUT	WHY IT MATTERS — WHAT TO DO INSTEAD
Framing palliative care as end-of-life only[25]	**Early integration** (within 8 weeks of diagnosis) **improves quality of life and survival** outcomes across stages — it is a standard of care, not a concession

ABBREVIATIONS: CARG = Cancer and Aging Research Group; CGA = comprehensive geriatric assessment; dCRT = definitive chemoradiation; EAC = esophageal adenocarcinoma; EGD = esophagogastroduodenoscopy; ESCC = esophageal squamous cell carcinoma; G-8 = Geriatric 8 screening; GEJ = gastroesophageal junction; HR = hazard ratio; NCCN = National Comprehensive Cancer Network; OS = overall survival; PET/CT = positron emission tomography/computed tomography; PPI = proton pump inhibitor; R54 = ICD-10 frailty code; SCC = squamous cell carcinoma

Key Differentials in Elderly

PRESENTATION	DIFFERENTIAL	KEY TESTS
Progressive dysphagia in patient ≥50[26]	Esophageal cancer (ESCC, EAC); peptic stricture; eosinophilic esophagitis; achalasia; esophageal motility disorder; extrinsic compression (mediastinal mass)	**EGD with biopsy esophageal manometry if motility suspected**; CT chest if extrinsic compression
Persistent GERD refractory to PPI in higher-risk patient[20]	Barrett's esophagus; EAC; functional heartburn; non-acid reflux; pill esophagitis; gastric outlet obstruction	**EGD with biopsy**; pH/impedance testing if reflux uncertain
Unintentional weight loss + dysphagia[12]	Esophageal cancer; head/neck cancer; gastric cancer; depression; hyperthyroidism; advanced dementia with feeding difficulty	**EGD with biopsy**; head/neck examination; TSH; nutrition assessment
New hoarseness without URI[11]	Recurrent laryngeal nerve invasion from esophageal mass; vocal cord paresis; laryngeal cancer; GERD-related laryngitis	**ENT scope**; EGD if dysphagia or risk factors;[1] CT neck/chest
Iron deficiency anemia unclear etiology[27]	Luminal GI malignancy (esophageal, gastric, colorectal); chronic NSAID use; menstrual loss in younger women; celiac disease	**EGD and colonoscopy**; iron studies; celiac serologies

ABBREVIATIONS: EAC = esophageal adenocarcinoma; EGD = esophagogastroduodenoscopy; ENT = ear, nose, and throat; ESCC = esophageal squamous cell carcinoma; GERD = gastroesophageal reflux disease; NSAID = nonsteroidal anti-inflammatory drug; PPI = proton pump inhibitor; TSH = thyroid-stimulating hormone; URI = upper respiratory infection

CLINICAL PEARL: SITE OF CARE

When the diagnostic workup points to imaging or endoscopy, **site of care** is a meaningful lever for increasing diagnostic efficiency while also reducing patient cost burden. For CT, MRI, and PET/CT, **free-standing imaging centers** consistently carry **lower facility fees** than outpatient hospital radiology departments, with no difference in diagnostic yield. For EGD with biopsy, an **ambulatory surgery center (ASC)** is the preferred alternative to a hospital outpatient department, cost savings are substantial, scheduling is often faster, and the procedure is equally appropriate for the complexity of esophageal evaluation in this population. For patients over 65, already navigating a new or worsening diagnosis, steering the workup away from hospital-based settings where possible is a practical, patient-centered step aligned with high-value care.

Comorbidity Screening

CONDITION	PREVALENCE/ASSOCIATION	SCREENING APPROACH
Malnutrition (E44.0/E44.1)	**~60–66% of elderly patients** at diagnosis; independent mortality predictor (HR 2.02)[28]	**Nutritional screen** (NRS-2002, MNA-SF) at diagnosis and during treatment; dietitian referral at diagnosis; document severity (mild/moderate/severe), weight loss %, and albumin
Sarcopenia (M62.84)	**≥10% muscle loss** during neoadjuvant chemoradiation is a powerful prognostic factor[29]	**Imaging-based muscle assessment** (CT L3 SMI); functional criteria if imaging unavailable
Frailty (R54)	Common in **older cancer patients**; independently predicts treatment toxicity, complications, and mortality[24]	G-8 Questionnaire; Fried Frailty Criteria; comprehensive geriatric assessment
Alcohol use disorder (F10.10–F10.20)	**Major ESCC risk factor** (OR 3–5×, synergistic with tobacco); frequently undercoded[14]	AUDIT-C; **document current use, severity, and pack-years/Brinkman Index**
Tobacco use (F17.210)	**Major risk factor for ESCC and EAC**	Document pack-years; brief intervention; quitline referral
Diabetes (E11.x)[30]	Prevalent Medicare-age comorbidity; associated with impaired treatment response and worse postoperative outcomes	HbA1c; **coordinate glycemic management** — tighter control during treatment supports mucosal healing

CONDITION	PREVALENCE/ASSOCIATION	SCREENING APPROACH
COPD (J44.1)[31]	**Cardiopulmonary burden often predicts dCRT** over surgery	**Pulmonary function** review; cardiopulmonary fitness for treatment selection
Cardiovascular disease[32]	**Independent driver of treatment selection**; radiotherapy-related cardiotoxicity surveillance recommended	Standard CV risk assessment; monitor for radiation-induced cardiotoxicity **during and after** treatment
GERD (K21.x) and Barrett's (K22.7x)[33]	EAC precursor pathway	**Confirm GERD chronicity and Barrett's status**; surveillance per AGA 2025 intervals

ABBREVIATIONS: AUDIT-C = Alcohol Use Disorders Identification Test (Consumption); CV = cardiovascular; dCRT = definitive chemoradiation; EAC = esophageal adenocarcinoma; ESCC = esophageal squamous cell carcinoma; G-8 = Geriatric 8 screening; HbA1c = hemoglobin A1c; HR = hazard ratio; MNA-SF = Mini Nutritional Assessment Short Form; NRS-2002 = Nutritional Risk Screening 2002; OR = odds ratio; OS = overall survival; SMI = skeletal muscle index

AAVBC PERSPECTIVE

The AAVBC encourages primary care providers to treat progressive dysphagia in patients ≥50 years as an indication for EGD within 2 weeks, independent of GERD history or prior imaging results. ***With a 5-year survival rate of 22.2%[5], esophageal cancer outcomes are strongly influenced by stage at diagnosis, and the primary care encounter represents the critical decision point at which early detection becomes possible. AAVBC supports timely endoscopic referral over observation or empiric PPI therapy when alarm symptoms are present, as delayed diagnosis remains the most significant barrier to curative-intent treatment eligibility in this disease.*** *Beyond dysphagia, secondary red flags warrant the same level of clinical urgency and should prompt expedited endoscopic evaluation. These include unintentional weight loss with dysphagia or odynophagia, iron deficiency anemia of unclear etiology, and persistent GERD refractory to 8 weeks of PPI therapy in males >50. AAVBC also supports offering Barrett's esophagus surveillance to patients with chronic GERD and ≥3 additional risk factors, as the Barrett's-to-adenocarcinoma progression pathway represents the only established precursor sequence for the predominant esophageal cancer subtype in the United States. Proactive risk stratification and early endoscopic evaluation are the most actionable tools available to primary care providers in this disease. This helps ensure the right patients are diagnosed at the right time and receive the right treatment.*

⚠ RED FLAG — EMERGENCY/ACTIVATE CRISIS RESPONSE

- Complete dysphagia with inability to swallow saliva — risk of aspiration
- Significant hematemesis or melena from a bleeding luminal tumor
- Suspected tumor perforation (severe chest/back pain, mediastinitis features)
- Airway compromise from mid/upper esophageal mass

→ Activate emergency department and surgical/GI on-call

⚠ RED FLAG — URGENT ACTION (24–72 HOURS)

- Progressive dysphagia in any patient ≥50 — schedule EGD within 2 weeks
- New hoarseness with known esophageal mass,possible recurrent laryngeal nerve invasion
- Unintentional weight loss >5% in 6 months with odynophagia or dysphagia
- Persistent GERD refractory to 8 weeks of PPI in males ≥50 with additional risk factors

3 MEAT DOCUMENTATION ESSENTIALS

Esophageal cancer documentation translates clinical complexity into a record that supports **continuity, quality measurement, and appropriate care planning.** The most **common gaps** are histology omission (ESCC vs. EAC), anatomic subsite under-specification (defaulting to C15.9 rather than C15.3/C15.4/C15.5 when endoscopy specifies location), biomarker omission (HER2, PD-L1, MSI/MMR, CLDN18.2), and absent geriatric assessment in older adults. **Each gap obscures the patient's real clinical picture and impedes shared decision-making with surgical, medical, and radiation oncology colleagues.**

Case vignette: A 72-year-old patient presents with 4 months of progressive dysphagia, initially with bread and meat, now also with soft foods, and 4 kg unintentional weight loss. The patient has a 15-year history of GERD on omeprazole, 30 pack-years of tobacco (quit 5 years ago), and reports moderate weekly alcohol use. Examination reveals BMI 24 (down from 28), dry mucous membranes, and unchanged neurologic exam.

MONITOR: **Wt 68 kg → 64 kg** over **4 months (6% loss).** Dysphagia progressing — **solids only → soft foods.** ADLs independent, cognition intact. **G-8 geriatric screen** ordered. NRS-2002 nutritional screen completed — **moderate risk**; dietitian referral placed.

EVALUATE: **EGD w/ biopsy** ordered, **urgent** (within 2 wks). Will obtain **6–8 biopsies** per NCCN protocol. If tissue confirms malignancy: CT chest/abd w/ contrast + PET/CT for staging. EUS for T/N staging at referral center. Biomarker panel pending histology: HER2, PD-L1 CPS, MSI/MMR, CLDN18.2 (if EAC); **PD-L1 CPS** (if ESCC).

ASSESS: EGD: **5 cm friable mass**, **lower third** esophagus. Path: moderately differentiated adenocarcinoma (EAC). Staging (PET/CT + EUS): cT3N1M0 — locoregional, potentially resectable. Biomarkers: **HER2 neg, PD-L1 CPS 8, MSI/MMR pending. G-8 score: 13/17** → comprehensive

geriatric assessment triggered.Active problem list updated: (1) Esophageal adenocarcinoma, lower third **(C15.5)**; (2) Severe protein-calorie malnutrition **(E44.0)**; (3) Tobacco use, in remission **(Z87.891)** — 30 pack-year hx; (4) Alcohol use disorder, moderate **(F10.20)**; (5) GERD on PPI **(K21.9)**; (6) Essential hypertension **(I10).**

TREAT: Referred to **multidisciplinary tumor board** (surgical, medical, radiation oncology + geriatric oncology) at high-volume center. Anticipated tx pathway: **perioperative FLOT** (4 pre-op + 4 post-op cycles); adjuvant nivolumab to be discussed if residual disease after R0 resection given CPS 8. **G-8 score 13** — **GA-guided dose adjustment may be needed**; dCRT to be discussed as an alternative if frailty worsens. **Supportive care initiated**: dietitian for nutritional optimization, smoking cessation counseling reinforced, alcohol cessation support, pharmacist med reconciliation. Advance care planning discussion initiated — goals of care, surrogate decision-maker, code status documented.

Clinical Documentation Elements

DOCUMENTATION ELEMENT	CODING DETAIL AND RATIONALE
Document histology explicitly	'Adenocarcinoma of the lower third of the esophagus **(C15.5)**' or 'Squamous cell carcinoma of the upper third **(C15.3)**' — **histology drives separate AJCC staging and separate NCCN treatment algorithms**
Document anatomic subsite from endoscopy	Use the **location relative to incisors and GEJ** to assign **C15.3** (upper), **C15.4** (middle), or **C15.5** (lower) — defaulting to **C15.9** when location is documented is a coding deficiency
Code each metastatic site separately	**C78.7** (liver), **C78.89** (other digestive), **C78.00** (lung), **C79.51** (bone), **C79.31** (brain) — each separately documented site supports the patient's clinical complexity and care coordination
Document biomarkers and stage type	HER2, PD-L1 CPS, MSI/MMR, CLDN18.2 (EAC); PD-L1 CPS (ESCC). **Note clinical** (cTNM), **pathologic** (pTNM), **and post-neoadjuvant** (ypTNM) **stage type** — they have different prognostic implications under AJCC 8th
Document the comorbidity burden	Malnutrition severity **(E44.0/E44.1)**, sarcopenia **(M62.84)** when imaging or functional criteria support it, frailty **(R54)**, alcohol **(F10.10–F10.20**) and tobacco status **(F17.210, Z87.891)**, diabetes **(E11.x)**, COPD **(J44.1)**, and cardiovascular disease
Document the geriatric assessment outcome	**G-8 score, comprehensive geriatric assessment summary, CGA-driven treatment modifications** (e.g., reduced-intensity dosing per Kawazoe 2026; dCRT consideration per Jensen 2023)

Reframing Common Documentation Shortcuts

INSTEAD OF…	DOCUMENT…
'Esophageal cancer'	'Moderately differentiated esophageal adenocarcinoma of the lower third (**C15.5**), clinical stage cT3N1M0; HER2 negative, PD-L1 CPS 8'
'Cancer of the esophagus, location not specified'	'Squamous cell carcinoma of the upper third of the esophagus (**C15.3**)' — **endoscopy almost always specifies location** relative to incisors and GEJ
'Metastatic esophageal cancer'	'Esophageal adenocarcinoma of the lower third (**C15.5**) with hepatic metastases (**C78.7**) and peritoneal metastases (**C78.6**)'— **code each site separately**
'On chemotherapy'	'Perioperative FLOT × 4 cycles (cycle 2 day 1; CTCAE grade 2 peripheral neuropathy)'
'Frail elderly patient'	'G-8 score 12 → comprehensive geriatric assessment completed; Fried Frailty Criteria positive; functional status ECOG 1; CGA-guided reduced-intensity chemotherapy planned per Kawazoe 2026'
'Weight loss'	'Severe protein-calorie malnutrition (**E44.0**) — 5.9% unintentional weight loss in 4 months; NRS-2002 score 4; dietitian-led intervention initiated'
'GERD'	'Long-standing GERD (**≥15 years symptomatic; K21.9**); Barrett's esophagus with low-grade dysplasia (**K22.710**) under annual surveillance'
'Treated with chemo and radiation'	'Definitive chemoradiation (dCRT) for ESCC, cT2N1M0, in a patient ≥75 with cardiopulmonary comorbidity; selected for comparable OS to trimodality therapy with lower morbidity'

ABBREVIATIONS: CGA = comprehensive geriatric assessment; CTCAE = Common Terminology Criteria for Adverse Events; dCRT = definitive chemoradiation; EAC = esophageal adenocarcinoma; ECOG = Eastern Cooperative Oncology Group; ESCC = esophageal squamous cell carcinoma; FLOT = fluorouracil, leucovorin, oxaliplatin, docetaxel; G-8 = Geriatric 8 screening; GEJ = gastroesophageal junction; HER2 = human epidermal growth factor receptor 2; NRS-2002 = Nutritional Risk Screening 2002; OS = overall survival; PD-L1 = programmed death-ligand 1

DOCUMENTATION

Every active esophageal cancer encounter should document **histology** (ESCC vs. EAC), **anatomic subsite** (C15.3/C15.4/C15.5), **stage** and **stage type** (cTNM, pTNM, ypTNM), **biomarkers** (HER2, PD-L1 CPS, MSI/MMR, CLDN18.2 for EAC; PD-L1 CPS for ESCC), current **treatment** line and cycle, **performance status** (ECOG), G-8/CGA findings if applicable, and the full comorbidity burden — malnutrition, sarcopenia, frailty, alcohol/tobacco use disorders, diabetes, COPD, and cardiovascular disease.

4 TREATMENT AND REFERRAL QUICK GUIDE

Treatment decisions in esophageal cancer rely on histology (ESCC vs. EAC), stage (clinical, pathologic, ypTNM), biomarker status, and functional/geriatric assessment, **chronological age alone should never drive the conversation.** NCCN v2.2026 lays out separate, histology-specific algorithms for exactly this reason. A fit 80-year-old may handle trimodality therapy as well as someone fifteen years younger; a frail 65-year-old may not. For the PCP, the highest-value contributions are **catching dysphagia early, making sure staging is complete** (PET/CT before any surgical discussion), **pushing for multidisciplinary review at a high-volume center, and staying ahead of the comorbidity burden** that ultimately determines what a patient can tolerate.

Therapy Escalation Criteria

TRIGGER	ACTION
Progressive dysphagia in patient ≥50[34]	**Order EGD with biopsy within 2 weeks** (CPT 43239) — do not trial PPI; **do not order barium swallow as a substitute**
Persistent GERD refractory to 8 weeks of PPI in patient ≥50 with risk factors[9]	**EGD with biopsy**; Barrett's screening per ACG 2022[35]
EGD confirms esophageal cancer[36]	Order **PET/CT** and **contrast CT** chest/abdomen; refer to high-volume multidisciplinary center for EUS and tumor board review
Histology = EAC, locoregional, resectable[34]	Perioperative FLOT (category 1); FLOT + durvalumab for PD-L1 CPS ≥1 (EGJ, category 1); surgical evaluation; postoperative nivolumab **after R0 resection** with residual disease (category 1)
Histology = ESCC, locoregional, resectable[34]	**Preoperative chemoradiation** (paclitaxel/carboplatin) → **esophagectomy** (category 1); **dCRT as alternative for patients ≥75 or with ≥2 comorbidities** — comparable OS, lower morbidity
Early-stage Tis or T1a (either subtype)[36]	**Endoscopic resection ± ablation at a high-volume EET center** — organ-preserving, curative intent, well-tolerated regardless of age
Advanced/metastatic EAC, HER2+[34]	**Fluoropyrimidine + oxaliplatin + trastuzumab ± pembrolizumab** (category 1); second-line fam-trastuzumab deruxtecan

TRIGGER	ACTION
Advanced/metastatic EAC, HER2– and PD-L1 CPS ≥1[34]	**Fluoropyrimidine + oxaliplatin + checkpoint inhibitor** (nivolumab/pembrolizumab/tislelizumab; category 1); add **zolbetuximab if CLDN18.2+**
Advanced/metastatic ESCC, PD-L1 CPS ≥1[34]	**Fluoropyrimidine + platinum + checkpoint inhibitor** (category 1); nivolumab + ipilimumab (chemotherapy-free option, category 1)
G-8 ≤14 or established frailty in older adult[37]	**Comprehensive geriatric assessment**; consider GA-based reduced-intensity (60–80% standard doses); favor two-drug over triplet regimens
Confirmed distant metastases on PET/CT before planned surgery[34]	Re-staging discussion at tumor board; **surgery is generally not appropriate for M1 disease** — pivot to systemic therapy ± palliative care integration
Malignant dysphagia not responsive to medical management[38]	**Esophageal stenting** (CPT 43266/43212) for palliation; coordinate with interventional GI; nutritional support

ABBREVIATIONS: ACG = American College of Gastroenterology; AGA = American Gastroenterological Association; CLDN18.2 = claudin 18.2; CPS = combined positive score; dCRT = definitive chemoradiation; EAC = esophageal adenocarcinoma; EET = endoscopic eradication therapy; EGD = esophagogastroduodenoscopy; EGJ = esophagogastric junction; ESCC = esophageal squamous cell carcinoma; FLOT = fluorouracil, leucovorin, oxaliplatin, docetaxel; G-8 = Geriatric 8 screening; HER2 = human epidermal growth factor receptor 2; OS = overall survival; PD-L1 = programmed death-ligand 1; PET/CT = positron emission tomography/computed tomography; PPI = proton pump inhibitor

NCCN-Aligned Treatment by Histology, Stage, and Patient Profile

STAGE/SETTING	PREFERRED REGIMEN(S)*	KEY NOTES
Tis/T1a (ESCC or EAC)[8]	Endoscopic resection (ER) ± ablation; curative intent with organ preservation	**5-year OS 71.2% in patients ≥80** with superficial ESCC treated by ER; well-tolerated regardless of age[39]
Locoregional ESCC, T1b–T4a, resectable[8]	Preoperative chemoradiation (paclitaxel/carboplatin) → esophagectomy (category 1); dCRT alternative for patients ≥75 or with ≥2 comorbidities	dCRT comparable OS in **selected** elderly/comorbid ESCC
Locoregional EAC, T1b–T4a, resectable[8]	Perioperative FLOT (category 1); FLOT + durvalumab for PD-L1 CPS ≥1 (EGJ, category 1); postoperative nivolumab after R0 resection with residual disease (category 1)	**FLOT replaces older CROSS-style regimens** as preferred for **EAC in fit patients**

STAGE/SETTING	PREFERRED REGIMEN(S)*	KEY NOTES
Metastatic EAC, HER2+[8]	Fluoropyrimidine + oxaliplatin + trastuzumab ± pembrolizumab (category 1	Second-line: fam-trastuzumab deruxtecan (category 1)
Metastatic EAC, HER2–, PD-L1 CPS ≥1[8]	Fluoropyrimidine + oxaliplatin + checkpoint inhibitor (category 1)	CLDN18.2+: **add zolbetuximab**
Metastatic ESCC, PD-L1 CPS ≥1[8]	Fluoropyrimidine + platinum + checkpoint inhibitor (category 1); nivolumab + ipilimumab chemotherapy-free option (category 1)	Chemotherapy-free option **preserves** treatment options in **vulnerable older adults**
Elderly/Frail (G-8 ≤14 or CGA-flagged)[8]	GA-based reduced-intensity (60–80% standard doses); two-drug regimens over triplets[40]	Kawazoe 2026: GA-based reduced-intensity significantly reduced postoperative complications (p=0.024) **without compromising short-term oncologic outcomes**[40]
Older adults with SCC unsuitable for trimodality[8]	CCRT with S-1: 2-year **OS 53.2% vs. 35.8% RT alone** (HR 0.63; p=0.002)[41]	Curative-intent option in vulnerable older ESCC patients

ABBREVIATIONS: CCRT = concurrent chemoradiotherapy; CGA = comprehensive geriatric assessment; CLDN18.2 = claudin 18.2; CPS = combined positive score; CROSS = ChemoRadiotherapy for Oesophageal cancer followed by Surgery Study; dCRT = definitive chemoradiation; EAC = esophageal adenocarcinoma; EGJ = esophagogastric junction; ER = endoscopic resection; ESCC = esophageal squamous cell carcinoma; FLOT = fluorouracil, leucovorin, oxaliplatin, docetaxel; G-8 = Geriatric 8 screening; GA = geriatric assessment; HER2 = human epidermal growth factor receptor 2; HR = hazard ratio; OS = overall survival; PD-L1 = programmed death-ligand 1; RT = radiotherapy; S-1 = tegafur/gimeracil/oteracil; SCC = squamous cell carcinoma ***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

CLINICAL PEARL— STAGING TIS/T1A

The gold standard for staging superficial esophageal lesions is the AJCC TNM system, with T1 substaged by depth of invasion into the esophageal wall. Tis represents high-grade dysplasia confined to the epithelium; T1a is invasion into the lamina propria or muscularis mucosae; T1b is invasion into the submucosa. Pre-resection staging relies on endoscopic ultrasound (EUS), but endoscopic resection of the lesion itself provides the definitive pathologic T stage. This distinction matters because lymph node metastasis risk rises sharply with depth, which is what makes ER with curative intent and organ preservation appropriate at Tis/T1a, and surgical evaluation the appropriate next step once submucosal invasion is confirmed.

Non-Pharmacologic Care and Supportive Interventions

INTERVENTION	TARGET/RECOMMENDATION	NOTES
Dietitian referral at diagnosis	Address malnutrition (present in **~60–66%** of elderly patients at diagnosis)[28]	**Early intervention** (not late) **improves outcomes**
Sarcopenia assessment	CT L3 SMI or functional criteria; reassess during neoadjuvant therapy	**≥10% muscle loss** during neoadjuvant chemoradiation is a powerful prognostic factor[29]
Geriatric assessment	G-8 ≤14 triggers comprehensive geriatric assessment	GA-guided management **reduces complications** without compromising oncologic outcomes; Kawazoe 2026 validation[40]
Esophageal stenting (palliation)[42]	For malignant dysphagia not responsive to medical management	CPT 43266/43212; coordinate with **interventional GI**; supports oral intake
Smoking-cessation support[8]	Quitline referral; pharmacotherapy if appropriate	**Reduces treatment toxicity**; supports recovery
Alcohol-cessation support[8]	AUDIT-C screen; brief intervention; specialty referral if AUD severe	Major ESCC risk factor; cessation supports treatment tolerance
Cardiovascular monitoring during/after radiotherapy[43]	Surveillance for radiation-induced cardiotoxicity	Coordinate with PCP for CV risk factor management throughout treatment
Early palliative care integration	Within **8 weeks of diagnosis**, irrespective of stage	**Reduces hospitalizations and ED visits**; improves QoL and survival
Advance care planning	**Annual + when goals change**	Document directives, surrogate, code status; especially relevant when functional status frames decisions

ABBREVIATIONS: AUD = alcohol use disorder; AUDIT-C = Alcohol Use Disorders Identification Test (Consumption); CV = cardiovascular; ED = emergency department; ESCC = esophageal squamous cell carcinoma; GA = geriatric assessment; G-8 = Geriatric 8 screening; HR = hazard ratio; PCP = primary care provider; QoL = quality of life; SMI = skeletal muscle index

Medication Safety and Key Interactions

DRUG/CLASS	INTERACTION/TOXICITY*	CLINICAL ACTION
FLOT (5-FU, leucovorin, oxaliplatin, docetaxel)[44]	**Grade ≥3** neutropenia; peripheral neuropathy (oxaliplatin); mucositis (5-FU); fluid retention (docetaxel)	**G-CSF prophylaxis** often required; monitor **CBC, CMP; CTCAE grading**; consider GA-based reduced-intensity in older adults
Paclitaxel/carboplatin (preoperative ESCC)[44]	Peripheral neuropathy; myelosuppression	**CBC weekly** during therapy; symptom assessment for neuropathy; toxicity grading
Trastuzumab (HER2+ EAC)[44]	Cardiotoxicity (decreased LVEF); infusion reactions	Baseline LVEF and serial monitoring **(every 3 months)**; coordinate cardio-oncology if LVEF declines
Checkpoint inhibitors (nivolumab, pembrolizumab, tislelizumab, durvalumab)[44]	Immune-related adverse events: thyroiditis, pneumonitis, colitis, hepatitis, endocrinopathies	Baseline labs and symptom-driven workup; corticosteroid algorithm per institution
Fam-trastuzumab deruxtecan (second-line HER2+ EAC)[44]	Interstitial lung disease; cytopenias; nausea	Pulmonary symptom screen **at each visit**; CT chest as indicated
Zolbetuximab (CLDN18.2+ EAC)[44]	Nausea/vomiting; infusion reactions	Prophylactic antiemetics; infusion-rate management
S-1 (CCRT in older ESCC)[41]	Cytopenias; mucositis; diarrhea	Reduced-intensity option with curative intent in vulnerable older adults; **monitor labs and toxicity weekly**
Opioids[44]	Constipation; respiratory depression in advanced disease	**Bowel regimen at initiation**; coordinate palliative care for refractory pain
Corticosteroid antiemetics[1]	Hyperglycemia; mucosal healing delay	**Tight glucose monitoring**; coordinate diabetes adjustments

ABBREVIATIONS: CBC = complete blood count; CCRT = concurrent chemoradiotherapy; CLDN18.2 = claudin 18.2; CMP = comprehensive metabolic panel; CTCAE = Common Terminology Criteria for Adverse Events; EAC = esophageal adenocarcinoma; ESCC = esophageal squamous cell carcinoma; FLOT = fluorouracil, leucovorin, oxaliplatin, docetaxel; G-CSF = granulocyte colony-stimulating factor; HER2 = human epidermal growth factor receptor 2; LVEF = left ventricular ejection fraction ***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

When to Refer

CRITERION	SPECIALIST	URGENCY
Complete dysphagia with inability to swallow saliva; significant hematemesis; suspected perforation	Emergency department/GI/ thoracic surgery	**Emergent**[44]
Progressive dysphagia in patient ≥50	GI for EGD; high-volume multidisciplinary center if cancer confirmed[1]	**Urgent** (EGD within 2 weeks)[44]
Persistent GERD refractory to 8 weeks of PPI in higher-risk patient	GI for EGD and Barrett's screening[8]	**Urgent** (within 2–4 weeks)
Confirmed esophageal cancer on biopsy	Multidisciplinary tumor board (surgical, medical, radiation oncology) at high-volume center	**Urgent** (within 1–2 weeks of pathology)[44]
G-8 ≤14 or significant frailty/ multimorbidity	Geriatric oncology/CGA	**Urgent** (before treatment cycle 1)[40]
Severe malnutrition/ sarcopenia	Registered dietitian; consider speech-language pathologist for dysphagia coordination[9,17]	**Urgent** (at diagnosis)[44]
Confirmed metastatic disease	Medical oncology; palliative care; multidisciplinary tumor board[1]	**Urgent** (within 1–2 weeks)[44]
Treatment-related immune adverse events	Endocrinology/pulmonology/GI/ hepatology as indicated	**Urgent** (per organ system involved)[44]
End-of-life trajectory; hospice eligible	Hospice (Medicare Hospice Benefit)	When goals align[44]

ABBREVIATIONS: CGA = comprehensive geriatric assessment; EGD = esophagogastroduodenoscopy; G-8 = Geriatric 8 screening; GERD = gastroesophageal reflux disease; PPI = proton pump inhibitor

CLINICAL PEARL: BIOLOGICAL VS CHRONOLOGIC AGE AGE

A fit 80-year-old may tolerate trimodality therapy similarly to a younger patient; a frail 65-year-old may not. **Use validated tools** (G-8 Questionnaire, VES-13, Fried Frailty Criteria, CARG chemotherapy toxicity prediction) rather than age alone. GA-based reduced-intensity chemotherapy (60–80% standard doses) significantly reduces postoperative complications without compromising short-term outcomes. Document the assessment outcome in the chart — this is what drives shared decision-making at tumor board.

Follow-Up Timing

STAGE/CATEGORY	FREQUENCY	LABS/MONITORING
Barrett's esophagus surveillance — no dysplasia (K22.70)	**Every 3–5 years**[44]	Surveillance EGD with biopsy protocol; consider **cessation ages 70–80** by comorbidity
Barrett's esophagus surveillance — low-grade dysplasia (K22.710)	Annual	Surveillance EGD; refer to EET center if progression suspected
Barrett's esophagus surveillance — high-grade dysplasia (K22.711)	Expedited within weeks	Refer to EET center; **do not delay**
EAC, locoregional, perioperative FLOT	Every **2–4 weeks** during therapy; restaging at MDT-defined intervals	CBC, CMP, LFTs; symptom and CTCAE toxicity grading; imaging per oncology protocol
ESCC, locoregional, neoadjuvant CRT or dCRT	Weekly during therapy; restaging per oncology	CBC, CMP; mucositis/ esophagitis assessment; nutrition monitoring
Post-resection surveillance	Every **3 months × 2 years**; every **6 months years 3–5**; **annual** thereafter[8]	Symptom review; weight; CBC, CMP, LFTs; imaging per oncology plan
Metastatic disease on systemic therapy	Every **2–3 weeks** during cycles[44]	CBC, CMP, LFTs; thyroid function (immunotherapy); LVEF if HER2-targeted
Off active treatment, surveillance	Per oncology plan; PCP every **3–6 months**[44]	Weight; dysphagia grade; comorbidity management; depression and ACP review

ABBREVIATIONS: ACP = advance care planning; CBC = complete blood count; CMP = comprehensive metabolic panel; CTCAE = Common Terminology Criteria for Adverse Events; CRT = chemoradiation; dCRT = definitive chemoradiation; EAC = esophageal adenocarcinoma; EET = endoscopic eradication therapy; EGD = esophagogastroduodenoscopy; ESCC = esophageal squamous cell carcinoma; FLOT = fluorouracil, leucovorin, oxaliplatin, docetaxel; HER2 = human epidermal growth factor receptor 2; LFT = liver function test; LVEF = left ventricular ejection fraction; MDT = multidisciplinary team; PCP = primary care provider

Comorbidity Management — Primary Care Role

COMORBIDITY	APPROACH	CAUTION
Malnutrition (E44.0/E44.1)	**Early dietitian referral**; serial weight, albumin, prealbumin; oral nutritional supplements; jejunostomy if oral intake inadequate	Independent predictor of treatment intolerance and mortality (HR 3.2); **do not delay**
Sarcopenia (M62.84)	**Resistance exercise per tolerance**; nutritional optimization (protein supplementation); reassess during neoadjuvant therapy	**≥10% muscle loss** during neoadjuvant chemoradiation is prognostic[29]
Frailty (R54)	Comprehensive geriatric assessment; physical therapy; medication review	**~52% of elderly esophageal cancer patients are pre-frail or frail** — drives treatment intensity decisions[45]
Diabetes (E11.x)	Tighter glycemic control during treatment; HbA1c trending	Delays mucosal healing
COPD (J44.1)	Pulmonary function review; optimize controllers **before** treatment	Cardiopulmonary burden often predicts **dCRT over esophagectomy**
Cardiovascular disease	Standard secondary prevention; cardio-oncology consultation if HER2-targeted or thoracic RT	Radiation-induced cardiotoxicity surveillance is recommended
Alcohol use disorder (F10.10–F10.20)	AUDIT-C; brief intervention; specialty referral for severe AUD	**Major ESCC risk factor** (OR 3–5×, synergistic with tobacco); cessation supports tolerance[14]
Tobacco use (F17.210)	Quitline referral; pharmacotherapy if appropriate	Continued use during treatment **increases toxicity and recurrence**
Polypharmacy in older adults	Medication reconciliation at every visit; deprescribing review	DDI risk increases with treatment regimens — coordinate with pharmacist
Depression/cognitive complaints	PHQ-9 at baseline and during treatment; address with pharmacologic and psychotherapeutic options	**Underdiagnosed in oncology**; early integration of palliative care improves QoL

ABBREVIATIONS: AUD = alcohol use disorder; AUDIT-C = Alcohol Use Disorders Identification Test (Consumption); CV = cardiovascular; dCRT = definitive chemoradiation; DDI = drug–drug interaction; ESCC = esophageal squamous cell carcinoma; HbA1c = hemoglobin A1c; HER2 = human epidermal growth factor receptor 2; HR = hazard ratio; OR = odds ratio; OS = overall survival; PHQ-9 = Patient Health Questionnaire-9; QoL = quality of life; RT = radiotherapy

Cost-Smart Options

BRAND (EST. COST)*	GENERIC/ ALTERNATIVE	MO. SAVINGS	COST-SMART TIP
Brand checkpoint inhibitor; Pembrolizumab ~$11,700/infusion; nivolumab ~$12,000–$26,000/mo list[46]	**No US biosimilar currently approved for pembrolizumab or nivolumab**; patient assistance via manufacturer	Manufacturer PAP can reduce eligible patient cost to $0–$375/infusion vs. uninsured list price; no generic substitution	Confirm coverage tier; pursue manufacturer support for eligible patients
Brand Taxotere + Eloxatin ~$7,000–$10,000/cycle drug cost[47,48]	All-generic FLOT (docetaxel + oxaliplatin + 5-FU + leucovorin) ~**$600–$700/cycle**[49]	**~$6,000–$9,000/cycle**	Use generics where available; document regimen by component for continuity
Esophagectomy (high-volume center) Mean inpatient cost ~$55,000–$92,000 depending on patient risk index[50]	Definitive chemoradiation for ESCC ≥75 or ≥2 comorbidities; mean monthly initial-treatment cost **~$7,731**	**$40,000–$80,000**+ total treatment episode savings in eligible patients	When clinically appropriate, dCRT reduces hospitalization and morbidity without compromising OS in selected patients
Conventional fractionated RT (dCRT, 28 fractions IMRT): ~$15,800/course Medicare reimbursement[51]	Hypofractionated short-course (≤10 fractions): **~$3,200/course — ~66% less**	**$6,000–$12,500** in RT costs; additional indirect savings from fewer visits and travel	Reduces travel and treatment time; coordinate with radiation oncology
Branded antiemetics Brand Emend Tripack (1×125 mg + 2×80 mg): ~$963 retail cash[52]	Generic aprepitant Tripack: **~$171** with GoodRx/SingleCare coupon; generic ondansetron oral **~$0.24–$5/dose**; reserve NK1 antagonists for high-risk regimens[53]	**~$792/cycle** switching brand Emend Tripack to generic aprepitant Tripack; larger savings replacing branded 5-HT3 with generic ondansetron	Coordinate with oncology; **avoid unnecessary 5-day packs**

BRAND (EST. COST)*	GENERIC/ ALTERNATIVE	MO. SAVINGS	COST-SMART TIP
Endoscopic resection (early-stage) Outpatient procedure; Medicare physician reimbursement for esophageal EMR ~$280–$886 vs. esophagectomy physician fee ~$3,081; total facility cost fraction of inpatient surgery[54]	Curative intent at substantially lower cost than esophagectomy	Significant; **avoids $55,000–$92,000** inpatient esophagectomy episode for eligible Tis/T1a patients	For Tis/T1a disease; organ-preserving, age-independent

ABBREVIATIONS: dCRT = definitive chemoradiation; ESCC = esophageal squamous cell carcinoma; FLOT = fluorouracil, leucovorin, oxaliplatin, docetaxel; NK1 = neurokinin-1; OS = overall survival ***Consult FDA labels for the most up-to-date dosage information, contraindications, and drug-drug interactions**

Patient Education and Adherence

Esophageal cancer patient education is uniquely demanding: the disease targets a population already vulnerable to **functional decline**, **malnutrition**, and **caregiver dependence**, while requiring them to navigate one of oncology's more complex multimodal treatment sequences. Patients must understand the full **pre-treatment workup** (**PET/CT, EUS, CT**), why **staging must precede surgical planning**, and a treatment plan that may combine **chemotherapy, radiation, surgery, and endoscopic procedures**. Poor understanding of staging is a preventable cause of treatment delays.

Nutritional support should be introduced early, not reactively. Discuss **small frequent meals**, **oral supplements**, and **jejunostomy** when indicated before decline sets in. Patients and caregivers also need explicit instruction on **what to report between visits**: worsening **dysphagia**, unintentional **weight loss**, new **pain**, and **fever**.

Palliative care should be framed as complementary to oncology treatment from diagnosis forward — not as an end-of-life transition. Introducing it early sets the right expectation for patients and families.

For patients with **sensory impairment**, **cognitive changes**, or **polypharmacy**, use **teach-back confirmation**, **large-print materials**, and **include caregivers** in all treatment discussions. **Document** education topics covered, confirm understanding, and note caregiver involvement per patient preference.

DOCUMENTATION

Document the topics covered (diagnosis, treatment plan, nutrition, what to report, palliative care role), the patient's understanding (teach-back when appropriate), and any teach-back validation. Education documentation supports continuity, quality measurement, and shared decision-making — and signals to other clinicians that the treatment plan is patient-aligned.

Quality Metrics Tie-In

MEASURE	STANDARD	APPLICABILITY TO ESOPHAGEAL CANCER
Care for Older Adults (HEDIS COA; MA Star Rating)	**Denominator:** MA enrollees ≥66, continuously enrolled **Numerator:** 4 sub-measures documented annually: functional status, medication review, pain assessment, advance care planning **Excl:** hospice, ESRD	**No single MIPS number maps to COA as a composite**; it remains a HEDIS/Stars-only measure. Most directly applicable cross-cutting measure for esophageal cancer care planning given dysphagia, weight loss, and treatment toxicity in older adults
Medication Reconciliation Post-Discharge (HEDIS TRC sub-measure 4; MIPS #46)	**Denominator:** patients ≥18 seen in outpatient setting within 30 days of inpatient discharge **Numerator:** discharge medication list reconciled with current medication list documented in outpatient record **Excl:** none specified	**Critical given polypharmacy and drug-drug interaction risk with FLOT chemotherapy and checkpoint inhibitors**; reconcile antiemetics, steroids, and anticoagulants at every post-discharge visit
Plan All-Cause Readmissions (HEDIS PCR; MIPS #479)	**Denominator:** enrollees ≥18 with acute inpatient discharge **Numerator:** unplanned readmission within 30 days (lower is better) **Excl:** planned readmissions, hospice, psychiatric	**MIPS #479 is group-level only and not individually reportable.** Post-esophagectomy 30-day readmission rates run as high as **21%**, and readmission within 30 days is associated with a roughly **4-fold increase in 90-day mortality**; coordinate transitions actively, especially for pulmonary, GI, and cardiovascular complications
Hospice and Palliative Care composite (CMS Star D-SNP)	**Denominator:** D-SNP enrollees with serious illness or advanced cancer diagnosis **Numerator:** documented hospice/palliative care discussion or referral per plan-specific composite criteria **Excl:** varies by plan; verify against current Star Rating Technical Notes	**No individual-clinician MIPS number exists for this composite.** ASCO guidelines recommend early palliative care integration, concurrent with active treatment, for patients with advanced cancer; initiate discussion within 8 weeks of diagnosis per NCCN-aligned timing

MEASURE	STANDARD	APPLICABILITY TO ESOPHAGEAL CANCER
Comprehensive Diabetes Care (HEDIS CDC; MIPS #1)	**Denominator:** patients 18-75 with diabetes (≥2 diagnoses on different service dates in MP or prior year, or diagnosis + dispensed diabetes medication) **Numerator (MIPS #1, inverse):** most recent HbA1c >9.0% or missing (lower rate = better performance) **Excl:** hospice, palliative care, frailty + advanced illness (≥66)	MIPS #1 is an inverse measure — **flag charting accordingly**. Relevant during corticosteroid-containing antiemetic regimens and post-treatment glycemic management; monitor HbA1c more frequently during active chemoradiation

ABBREVIATIONS: ACP = advance care planning; ASCO = American Society of Clinical Oncology; AWV = Annual Wellness Visit; CDC = Comprehensive Diabetes Care; CMS = Centers for Medicare & Medicaid Services; COA = Care for Older Adults; D-SNP = Dual Special Needs Plan; ESRD = end-stage renal disease; FLOT = fluorouracil, leucovorin, oxaliplatin, docetaxel; HbA1c = hemoglobin A1c; HEDIS = Healthcare Effectiveness Data and Information Set; MA = Medicare Advantage; MIPS = Merit-based Incentive Payment System; MP = measurement period; NCCN = National Comprehensive Cancer Network; PCR = Plan All-Cause Readmissions; TRC = Transitions of Care

AAVBC PERSPECTIVE

AAVBC supports the integration of PET/CT into the standard preoperative staging workup for esophageal cancer, alongside CT and EUS, prior to surgical consultation*. Accurate staging is essential to ensure that patients are appropriately triaged to curative-intent versus palliative treatment pathways, and incomplete staging represents one of the most consequential quality gaps in esophageal cancer care. PET/CT identifies distant metastases that CT alone may miss, while EUS provides locoregional assessment of tumor depth and nodal involvement, both of which inform neoadjuvant therapy eligibility and surgical planning. When staging is incomplete, patients with undetected metastatic disease may be referred for esophagectomy, a high-morbidity procedure that confers no survival benefit in this setting. Proactive involvement in the staging workup is a measurable, actionable quality standard within value-based oncology care. This helps* ***ensure the right patients receive the right treatment at the right stage of disease.***

QUALITY OUTCOME:

Esophageal cancer is largely preventable and early action is valuable. Counseling patients on tobacco cessation, weight management, and GERD control before cancer develops is the first intervention. When symptoms arise, recognizing progressive dysphagia as an alarm rather than an aging complaint, and acting within 2 weeks keeps early-stage disease within the window for organ-preserving treatment. Completing staging before any surgical planning, connecting patients to high-volume multidisciplinary centers, and proactively managing malnutrition and frailty means patients reach the right treatment at the right intensity. The result is less morbidity, better function, and a quality of life worth protecting.

5 CODING REMINDERS AND CASE EXAMPLES

Coding Specificity

ELEMENT	DOCUMENTATION REQUIREMENT
Anatomic subsite (C15.3/C15.4/C15.5)	Specify location relative to incisors and GEJ from endoscopy — **never default to C15.9** when location is documented
Histology (ESCC vs. EAC)	**Document explicitly in the clinical record** — drives separate AJCC staging and separate NCCN treatment algorithms
Overlapping sites (C15.8)	Assign when the tumor spans **two or more subsites** — do not default to subsite with tumor bulk
Each metastatic site coded separately	**C78.7** liver, **C78.89** other digestive, **C78.00** lung, **C79.51** bone, **C79.31** brain — **each documented site reflects clinical complexity**
Stage and stage type	AJCC 8th Edition; document **cTNM, pTNM, or ypTNM**
Biomarker status	**EAC:** HER2, PD-L1 CPS, MSI/MMR, CLDN18.2; **ESCC:** PD-L1 CPS
Performance and geriatric status	ECOG; G-8 score; CGA findings; document treatment modifications
Barrett's surveillance codes	**K22.70, K22.710, K22.711** with surveillance interval rationale

ELEMENT	DOCUMENTATION REQUIREMENT
Active vs. personal history	**Use C15.x while disease is active or under surveillance**; **Z85.09 only after treatment completion** with no active disease
Comorbidities — frequently undercoded	Malnutrition **(E44.0/E44.1**), sarcopenia **(M62.84)**, frailty **(R54)**, alcohol use disorder **(F10.10–F10.20)**, tobacco **(F17.210/Z87.891)**, diabetes **(E11.x)**, COPD **(J44.1)**

ABBREVIATIONS: AJCC = American Joint Committee on Cancer; CGA = comprehensive geriatric assessment; CLDN18.2 = claudin 18.2; CPS = combined positive score; EAC = esophageal adenocarcinoma; ECOG = Eastern Cooperative Oncology Group; ESCC = esophageal squamous cell carcinoma; G-8 = Geriatric 8 screening; GEJ = gastroesophageal junction; HER2 = human epidermal growth factor receptor 2; MMR = mismatch repair; MSI = microsatellite instability; PD-L1 = programmed death-ligand 1

Annual Clinical Review and Confirmation

- **Annual review:** Active esophageal cancer must be reassessed annually with MEAT documented; in patients on active treatment or surveillance, the diagnosis is current and requires ongoing documentation each year
- **Visit modality:** Face-to-face or synchronous audio-video telehealth qualifies when it supports meaningful clinical evaluation; chart updates without an encounter do not satisfy MEAT
- **Clinical context:** Under CMS-HCC V28, active malignancy maps to HCC 20); each separately documented metastatic site supports additional HCC mapping (HCC 18)
- **Avoid rollover:** Do not copy forward last year's note without updating treatment status, current line of therapy and cycle, current stage/biomarker status, metastatic sites, performance and geriatric status, and the comorbidity burden

Good Documentation is Comprehensive Coding

EHR TIP	WHAT TO INCLUDE
Problem list precision	'Esophageal adenocarcinoma, lower third **(C15.5)**, cT3N1M0; HER2 negative, PD-L1 CPS 8' — not 'esophageal cancer'
Smart phrases/dot phrases	Build macros for Pre-Treatment Workup Completion (EGD + biopsy date, PET/CT date, EUS date, CT date) and Geriatric Assessment Outcome (G-8, CGA summary, treatment modifications)
Lab and imaging linking	Link the PET/CT result to staging; link biomarker results to the active cancer code

EHR TIP	WHAT TO INCLUDE
Active vs. surveillance status	Use a status field at the top of every note — 'Active treatment, cycle X of Y' vs. 'Post-treatment surveillance, Y3 month X'
Surveillance flags	Recurring reminders for Barrett's surveillance **(K22.70/ K22.710/K22.711)** and post-treatment surveillance intervals
Education templates	Teach-back templates so the diagnosis, plan, nutrition, and palliative care role are recorded as patient-understood

ABBREVIATIONS: C15.5 = ICD-10 lower esophagus; CGA = comprehensive geriatric assessment; EGD = esophagogastroduodenoscopy; EUS = endoscopic ultrasound; G-8 = Geriatric 8 screening; HER2 = human epidermal growth factor receptor 2; PD-L1 = programmed death-ligand 1; PET/CT = positron emission tomography/computed tomography

EHR Workflow Tips

- **SMARTPHRASE — .ESO_VISIT — Annual visit template:** histology (squamous cell vs adenocarcinoma), anatomic subsite, AJCC stage, biomarker status (PD-L1 CPS, HER2, MSI/ MMR), Barrett's status, current line of systemic therapy, ECOG, weight trajectory/nutrition, and every coded metastatic site
- **SMARTPHRASE — .ESO_MEAT — MEAT block:** Monitor dysphagia, weight, nutrition; Evaluate response/tolerance and swallowing; Assess ECOG and goals of care; Treat per tumor-board plan, linked to oncology note
- **ORDER SET —Dysphagia workup** — EGD with biopsy (CPT 43239), CBC, iron studies, barium esophagram if indicated; fires for new/progressive dysphagia or unintentional weight loss in adults ≥50
- **FILTER —** Population filter — identifies patients with active C15.x on systemic therapy for proactive nutrition, swallowing, and palliative-care outreach

Brief Case Examples

SUCCESS — Early Dysphagia Recognition and Multidisciplinary Care

Patient: 72-year-old with 4 months of progressive dysphagia (solids → soft foods), 4 kg weight loss, 15-year GERD on omeprazole, 30 pack-years (quit 5 years ago), moderate alcohol use

Documentation: 'Progressive dysphagia in a patient ≥50 — EGD with biopsy ordered within 2 weeks (CPT 43239). Concurrent staging plan if biopsy positive: PET/CT and contrast CT chest/ abdomen. Dietitian referred at first encounter; G-8 ordered for geriatric vulnerability screen'

Outcome: Biopsy: moderately differentiated EAC, lower third (C15.5). Staging cT3N1M0; PD-L1 CPS 8; HER2 negative. Multidisciplinary review at high-volume center → perioperative FLOT × 4 pre- and post-op; CGA-guided dosing modification due to G-8 13. Severe malnutrition (E44.0) treated with

early dietitian support; alcohol cessation supported. R0 resection; postoperative nivolumab discussion for residual disease per pathology

PITFALL — PPI Escalation Instead of EGD

Documentation as written: '68-year-old male with chronic GERD and new mild dysphagia. Increased omeprazole to 40 mg BID. Follow up in 3 months. Esophageal cancer (C15.9, unspecified) added to problem list later when EGD performed at month 5'

Consequence: Progressive dysphagia in any patient ≥50 is an alarm symptom requiring EGD within 2 weeks — not PPI escalation. PPI may transiently improve symptoms while a tumor progresses. Coding C15.9 when endoscopy specified middle-third location is a separate documentation failure

RAF Impact: Late-stage diagnosis shifts treatment from potentially curative trimodality to systemic therapy with poorer outcomes. Each metastatic site coded separately (HCC 18, RAF 2.341) would have been avoidable with timely diagnosis. C15.9 misses the documentation specificity NCCN treatment algorithms require

Fix: Order EGD within 2 weeks for any progressive dysphagia in a patient ≥50, regardless of GERD history. Specify C15.3/C15.4/C15.5 from endoscopy location.[1] Confirm histology (ESCC vs. EAC) and document biomarkers (HER2, PD-L1 CPS, MSI/MMR, CLDN18.2 for EAC; PD-L1 CPS for ESCC). Refer to multidisciplinary tumor board promptly

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