Q&A

• Please submit all questions concerning webinar content through the Q&A panel.

Reminder:

• If you have participants watching this webinar at your site, please collect their names and emails.
  – We will be distributing a Q&A document in about one week. This document will fully answer questions asked during the webinar and will contain any corrections that we may discover after the webinar.
Agenda
- Overview
- Collaborative Stage Data Collection System
- Treatment

OVERVIEW

Key Statistics
- Estimated new cases and deaths from throat cancer (including cancers of the larynx) in the United States in 2012
  - New Cases 13,510
  - Deaths 2,330
Risk Factors

- Alcohol
- Tobacco
- HPV infection

Anatomy of the Pharynx

- Nasopharynx
- Oropharynx
- Hypopharynx

Nasopharynx

- C11.0 Superior wall of nasopharynx
  - Roof of nasopharynx
- C11.1 Posterior wall
  - Adenoid
  - Pharyngeal tonsil
- C11.2 Lateral wall
  - Fossa of Rosenmuller
Nasopharynx

- C11.3 Anterior wall
  - Nasopharyngeal surface of the soft palate
  - Pharyngeal fornix
  - Choana
  - Posterior margin of the nasal septum
- C11.8 Overlapping
- C11.9 NOS

Oropharynx

- C10.0 Valleculla
- C10.1 Anterior surface of the epiglottis
- C10.2 Lateral wall of oropharynx
  - Lateral wall of the mesopharynx
Oropharynx

- C10.3 Posterior wall of the oropharynx
  - Posterior wall of the mesopharynx
- C10.4 Branchial cleft
- C10.8 Overlapping lesion
  - Junctional region
- C10.9 Oropharynx NOS
  - Mesopharynx, NOS
  - Fauces, NOS

Hypopharynx

- C13.0 Postcricoid region
  - Ercopharynx
  - Cricoid, NOS
- C13.1 Hypopharyngeal aspect of aryepiglottic fold
  - Aryepiglottic fold
  - Arytenoid fold
- C13.2 Posterior wall of the hypopharynx
**Hypopharynx**

- C13.8 Overlapping lesion of the hypopharynx
- C13.9 Hypopharynx, NOS
  - Hypopharyngeal wall
  - Laryngopharynx

**Pharynx, NOS**

- C14.0 Pharynx, NOS
  - Pharyngeal wall, NOS
  - Wall of pharynx, NOS
  - Lateral wall of pharynx, NOS
  - Posterior wall of pharynx, NOS
  - Retropharynx
  - Throat
- C14.2 Waldeyer Ring
- C14.8 Overlapping lesion of the lip, oral cavity, and pharynx

**Other Primary Sites in the Pharynx**

- Base of Tongue
- Soft Palate
- Uvula
- Tonsils
  - Palatine
    - Right and left
  - Lingual
  - Pharyngeal
  - Adenoids
Histology

Types of Epithelium

- Simple squamous
- Stratified squamous
- Stratified cuboidal
- Simple cuboidal
- Pseudostratified columnar
- Simple columnar
- Transitional

Histology

- Epithelial
  - Squamous Cell Carcinoma
  - Basaloid squamoid carcinoma
  - Small cell carcinoma
- Non-epithelial
  - Lymphoma, sarcoma, melanoma

HEAD AND NECK LYMPH NODES
Important Landmarks

- Mandible
- Hyoid Bone
- Cricoid Cartilage
- Clavicle
- Internal Jugular Vein

Level 1-7 Lymph Nodes

Level IA Lymph Nodes
Level IB Lymph Nodes


Level 2
Level 3
Level 4
Level 5
Level 6
Level 7

Submandibular Triangle
Hypoglossal
Internal carotid
Cricoid
Jugular notch
Supraclavicular fossa
Other Lymph Node Groups
- Facial/Buccinator
- Nasolabial
- Parotid
- Preauricular
- Occipital

First Echelon Lymph Nodes
- Nasopharynx and Oropharynx
  - Level II (A or B)
  - Level III
  - Level V (A or B)
- Hypopharynx
  - Level II (A or B)
  - Level III
  - Level IV

Distant Metastasis
- Distant metastasis is relatively uncommon at diagnosis
  - Lung
  - Bone
  - Liver
- AJCC Stage IV
  - IVA moderately advanced local/regional disease
  - IVB very advanced local/regional disease
  - IVC Distant metastasis
Coding Primary Site

1. Tumor Board
   a. Specialty
   b. General

2. Staging physician’s site assignment
   a. AJCC staging form
   b. TNM statement in medical record

3. If neither 1 or 2 available, based on whether tumor was resected

4. If total resection of primary tumor was done, code based on:
   a. Operative report – surgeon’s statement
   b. Final diagnosis on pathology report
Coding Primary Site

5. If total resection was NOT done code based on:
   a. Endoscopy
   b. Radiation oncologist
   c. Diagnosing physician
   d. Primary care physician

Continued on next slide

Coding Primary Site

e. Other physician
f. Diagnostic imaging
g. Physician statement based on clinical examination

Default Site Codes

• Point of origin cannot be determined
  – C02.8 Overlapping lesion of tongue
  – C08.8 Overlapping lesion of major salivary glands
  – C14.8 Overlapping lesion of lip, oral cavity, and pharynx
QUIZ 1

Pharynx

COLLABORATIVE STAGE DATA COLLECTION SYSTEM (CSV02.04)

Pharynx Schemas CS v02.04

- Nasopharynx
  - Nasopharynx (C11.0 - C11.9)
- Oropharynx
  - Base of Tongue and Lingual Tonsil (C01.9, C02.4)
  - Soft Palate and Uvula (C05.1-C05.2)
  - Tonsil & Oropharynx (C09.0 - C09.9, C10.0, C10.2 - C10.9)
  - Pharyngeal Tonsil (C11.1)
Pharynx Schemas CS v02.04

- Hypopharynx
  - Pyriform Sinus, Hypopharynx, Laryngopharynx (C12.9, C13.0 - C13.9)
- Pharynx NOS
  - Pharynx, NOS, and Overlapping Lesion of Lip, Oral Cavity, and Pharynx (C14.0 - C14.8)

Pharynx Schemas CS v02.04

Melanoma

- Melanoma Nasopharynx (C11.0 - C11.9)
- Melanoma Base of Tongue and Lingual Tonsil (C01.9, C02.4)
- Melanoma Soft Palate and Uvula (C05.1-C05.2)
- Melanoma Tonsil & Oropharynx (C09.0 - C09.9, C10.0, C10.2 - C10.9)
- Melanoma Pyriform Sinus, Hypopharynx, Laryngopharynx (C12.9, C13.0 - C13.9)
- Melanoma Pharynx, NOS, and Overlapping Lesion of Lip, Oral Cavity, and Pharynx (C14.0 - C14.8)

CS Tumor Size

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>No mass/tumor found</td>
</tr>
<tr>
<td>001-988</td>
<td>001-988 mm (Exact size to nearest mm)</td>
</tr>
<tr>
<td>989</td>
<td>989 mm or larger</td>
</tr>
<tr>
<td>990</td>
<td>Microscopic focus or foci and no size given</td>
</tr>
<tr>
<td>991</td>
<td>Less than 1 cm</td>
</tr>
<tr>
<td>992</td>
<td>Less than 2 cm OR greater than 1 cm OR between 1 cm and 2 cm Stated as T1 with no other information on size*</td>
</tr>
</tbody>
</table>

*Oropharynx schemas; Pharynx NOS schema
CS Tumor Size

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>993</td>
<td>Less than 3 cm OR greater than 2 cm OR between 2 cm and 3 cm</td>
</tr>
<tr>
<td>994</td>
<td>Less than 4 cm OR greater than 3 cm OR between 3 cm and 4 cm Stated as T2 with no other information on size*</td>
</tr>
<tr>
<td>995</td>
<td>Less than 5 cm OR greater than 4 cm OR between 4 cm and 5 cm</td>
</tr>
<tr>
<td>996</td>
<td>Greater than 5 cm</td>
</tr>
<tr>
<td>999</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

*Oropharynx schemas; Pharynx NOS schema

CS Extension: Nasopharynx

- Code 000: In situ
- Codes 105-510: Confined to nasopharynx or extends to oropharynx and/or nasal cavity without parapharyngeal extension
- Codes 555-590: Parapharyngeal extension
- Codes 605-645: Involves bony structures of skull base and/or paranasal sinuses
- Codes 710-810: Intracranial extension and/or involvement of cranial nerves, hypopharynx, orbit, or extension to infratemporal fossa/masticator space

CS Extension: Oropharynx

Base of Tongue & Lingual Tonsil

- Code 000: In situ
- Codes 100-620: T category based on tumor size
- Codes 640-650: Extends to lingual surface of epiglottis
- Codes 710-775: Moderately advanced local disease
  - Invades larynx, extrinsic muscle of tongue, medial pterygoid, hard palate, or mandible
- Codes 780-810: Very advanced local disease
  - Invades lateral pterygoid muscle, pterygoid plates, lateral nasopharynx, skull base, or encases carotid artery
CS Extension: Oropharynx

Soft Palate & Uvula
- Code 000: In situ
- Codes 100-600: T category based on tumor size
- Codes 640-645: Extends to lingual surface of epiglottis
- Codes 650-735: Moderately advanced local disease
  - Invades larynx, extrinsic muscle of tongue, medial pterygoid, hard palate, or mandible
- Codes 740-810: Very advanced local disease
  - Invades lateral pterygoid muscle, pterygoid plates, lateral nasopharynx, skull base, or encases carotid artery

CS Extension: Oropharynx

Tonsil & Oropharynx
- Code 000: In situ
- Codes 150-520: T category based on tumor size
- Codes 530-540: Extends to lingual surface of epiglottis
- Codes 610-705: Moderately advanced local disease
  - Invades larynx, extrinsic muscle of tongue, medial pterygoid, hard palate, or mandible
- Codes 708-810: Very advanced local disease
  - Invades lateral pterygoid muscle, pterygoid plates, lateral nasopharynx, skull base, or encases carotid artery

CS Extension: Oropharynx

Pharyngeal Tonsil
- Code 000: In situ
- Codes 105-566: T category based on tumor size
- Codes 568-575: Extends to lingual surface of epiglottis
- Codes 610-665: Moderately advanced local disease
  - Invades larynx, extrinsic muscle of tongue, medial pterygoid, hard palate, or mandible
- Codes 710-810: Very advanced local disease
  - Invades lateral pterygoid muscle, pterygoid plates, lateral nasopharynx, skull base, or encases carotid artery
CS Extension: Hypopharynx

- Code 000: In situ
- Code 100: Limited to 1 subsite of hypopharynx
- Code 200; 400-450: Invades more than 1 subsite of hypopharynx or an adjacent site without fixation of hemilarynx
- Codes 550-560: Fixation of hemilarynx or extension to esophagus
- Codes 600-638: Moderately advanced local disease
  - Invades thyroid/cricoid cartilage, hyoid bone, thyroid gland, or central compartment soft tissue
- Codes 640-810: Very advanced local disease
  - Invades prevertebral fascia, encases carotid artery, or involves mediastinal structures

CS Extension: Pharynx NOS

- Code 000: In situ
- Codes 100-300: Confined to site of origin
- Codes 400-600: More than 1 region of pharynx involved or extension to adjacent organs or structures
- Code 800: Further contiguous extension

Pop Quiz

- Tonsillectomy: Squamous cell carcinoma, 2.5 cm tumor, confined to tonsil; pT2.
- What is the code for CS Extension?
  - 150: Invasive tumor confined to 1 of the following subsites: Anterior wall including vallecula; 1 lateral wall; posterior wall
  - 310: Stated as T2 with no other information on extension
  - 999: Unknown
CS Lymph Nodes: All Pharynx Schemas

- Includes lymph nodes defined as Levels I-VII and Other by AJCC
- Other information about regional lymph node involvement coded in SSF 1, 3-9
- Consider nodes ipsilateral if laterality not specified or midline nodes
- If nodes described as supraclavicular, determine if Level IV or Level V
  - Code as Level V if level cannot be determined

CS Lymph Nodes: Nasopharynx

- Choose code that specifies
  - Specific nodes involved
  - Bilateral, contralateral, or not stated if bilateral or contralateral

CS Lymph Nodes: Oropharynx & Hypopharynx

- Choose code that specifies
  - Specific nodes involved
  - Single or multiple nodes involved
  - Bilateral, contralateral, or not stated if bilateral or contralateral
CS Lymph Nodes: Pharynx NOS

• Choose code that specifies
  — Specific nodes involved

Pop Quiz

• Squamous cell carcinoma of nasopharynx with involvement of bilateral Level II lymph nodes and left Level IV lymph nodes.
• What is the code for CS Lymph Nodes?
  — 105: Unilateral positive Level II lymph nodes
  — 130: Unilateral positive Level IV lymph nodes
  — 405: Positive bilateral nodes listed in code 105
  — 430: Positive bilateral nodes, any listed in code 130
    WITH or WITHOUT nodes listed in code 105 or 115

CS Mets at DX: All Pharynx Schemas

• Record distant metastasis including lymph nodes and/or distant sites at the time of diagnosis
• Code involvement of mediastinal lymph nodes, excluding superior mediastinal lymph nodes, in CS Mets at DX
• Code involvement of supraclavicular and transverse cervical lymph nodes in CS Lymph Nodes
**SSF1: Size of Lymph Nodes**

- Code largest diameter of involved regional nodes
- Clinical assessment
  - Code size as described in clinical or radiographic exam
- Pathologic assessment
  - Code size as described on pathology report

**Pop Quiz**

- Squamous cell carcinoma of nasopharynx. Per physical exam cervical nodes involved with size of largest involved node 3 cm. CT scan of neck showed nasopharynx tumor and largest involved cervical node 1.8 cm.
- What is the code for SSF1?
  - 018
  - 030
  - 999

**SSF3 – SSF6: Lymph Node Levels for Head and Neck**

- SSF 3: Levels I-III
- SSF 4: Levels IV, V, retropharyngeal nodes
- SSF 5: Levels VI, VII, facial nodes
- SSF 6: Parapharyngeal, parotid, and suboccipital/retroauricular nodes
SSF3 – SSF6: Node Levels

- Code presence or absence of node involvement
- One digit used to represent lymph nodes of a single level
- If you only have information about one level of lymph nodes, code all other lymph levels as 0
- If you know regional lymph nodes are positive but the lymph node level is unknown, code 000
- If no lymph nodes are involved clinically or pathologically, code 000

SSF3: Levels I-III

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Level I lymph node(s) involved</td>
</tr>
<tr>
<td>010</td>
<td>Level II lymph node(s) involved</td>
</tr>
<tr>
<td>001</td>
<td>Level III lymph node(s) involved</td>
</tr>
<tr>
<td>110</td>
<td>Levels I and II lymph nodes involved</td>
</tr>
<tr>
<td>101</td>
<td>Levels I and III lymph nodes involved</td>
</tr>
<tr>
<td>011</td>
<td>Levels II and III lymph nodes involved</td>
</tr>
<tr>
<td>111</td>
<td>Levels I, II and III lymph nodes involved</td>
</tr>
</tbody>
</table>

SSF7: Upper and Lower Cervical Node Levels

- Upper Cervical Nodes
  - Level I, II, III, VA
  - Facial, Parotid, Parapharyngeal, Retropharyngeal, Retroauricular, and Suboccipital
- Lower Cervical Nodes
  - Level IV, VB, VII
- Level VI can be either upper or lower
Pop Quiz

- Squamous cell carcinoma of nasopharynx with involvement of bilateral Level II lymph nodes, left Level IV lymph nodes, and bilateral Level V nodes.
- What is the code for SSF7?
  - 010: Upper level lymph nodes involved
  - 020: Lower level lymph nodes involved
  - 030: Upper & lower level lymph nodes involved
  - 040: Unknown level lymph nodes involved

Extracapsular Extension

- When tumor with a lymph nodes extends beyond the wall of the node into the perinodal fat.

Extracapsular Extension, Lymph Nodes

SSF8: Clinically
- Physical Exam
  - Fixed
  - Matted
- Imaging
  - Amorphous
  - Spiculated margins
  - Stranding into perinodal soft tissue

SSF9: Pathologically
- Macroscopic
  - May be described in gross dissection
  - Takes priority over microscopic description
- Microscopic
  - May not be evident in gross exam
  - Described in microscopic section of path report
Pop Quiz
• CT scan of neck: Oropharyngeal tumor, most likely malignant, malignant cervical node adenopathy.
• Laryngoscopy & biopsy: Squamous cell carcinoma of oropharynx, tumor greater than 3 cm.
• Referred to oncology for chemotherapy.

Pop Quiz
• What is the code for SSF8?
  – 000: No regional nodes involved clinically
  – 010: Regional nodes involved clinically, no extracapsular extension clinically
  – 030: Regional nodes involved clinically, unknown if extracapsular extension
  – 998: No clinical exam of regional lymph node

Pop Quiz
• What is the code for SSF9?
  – 000: No regional lymph nodes involved pathologically
  – 010: Regional lymph nodes involved pathologically, no extracapsular extension pathologically
  – 050: Regional nodes involved pathologically, unknown if extracapsular extension
  – 998: No histopathologic exam of regional nodes
**SSF10: Human Papilloma Virus (HPV) Status**

- HPV plays a role in the pathogenesis of some cancers
- Results of HPV testing on cancer tissue
- Highest risks: Types 16 and 18
- Other high risk: multiple types noted in SSF table
- HPV vaccine designed to protect against types 16, 18, 6, 11
- Codes 000 or 060
  - If test reports only negative or positive for high-risk HPV

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**SSF25: Schema Discriminator**

**Nasopharynx/Pharyngeal Tonsil**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Schema</th>
</tr>
</thead>
<tbody>
<tr>
<td>010</td>
<td>Posterior wall of nasopharynx</td>
<td>Nasopharynx</td>
</tr>
<tr>
<td></td>
<td>Posterior wall of nasopharynx NOS</td>
<td></td>
</tr>
<tr>
<td>020</td>
<td>Adenoid pharyngeal tonsil</td>
<td>PharyngealTonsil</td>
</tr>
<tr>
<td></td>
<td>Nasopharyngeal tonsil</td>
<td></td>
</tr>
<tr>
<td>981</td>
<td>Nasopharynx cases coded to C11.0, C11.2, C11.3, C11.8, C11.9</td>
<td>Nasopharynx</td>
</tr>
</tbody>
</table>

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**QUESTIONS?**
Unresectable Disease

- Unresectable
  - Physician does not feel they can remove all gross disease
  - Surgery will not achieve localized control of the disease

- Inoperable
  - Patient that is a surgical candidate, but surgery is not done due to comorbid conditions
Salvage Surgery

- Patients that do not have a total response to chemotherapy and/or radiation may have salvage therapy to remove any residual cancer.

Surgery

- 30 Pharyngectomy, NOS
  - 31 Limited/partial pharyngectomy; tonsillectomy, bilateral tonsillectomy
  - 32 Total pharyngectomy

- 40 Pharyngectomy WITH laryngectomy OR removal of contiguous bone tissue, NOS (does NOT include total mandibular resection)
  - 41 WITH Laryngectomy (laryngopharyngectomy)
  - 42 WITH bone
  - 43 WITH both 41 and 42
Surgery

- 50 Radical pharyngectomy (includes total mandibular resection), NOS
- 51 WITHOUT laryngectomy
- 52 WITH laryngectomy

Neck Dissection

- Comprehensive neck dissection
  - Removal of level I-V lymph nodes
- Selective neck dissection for pharyngeal primaries
  - Neck dissection based on the understood common pathways of spread for head and neck cancers.
  - Removal of II-IV and VI if required

Neck Dissection

- Selective neck dissection
  - Neck dissection based on the understood common pathways of spread for head and neck cancers.
  - Patient who receive a selective neck dissection are generally clinically node negative.
Radiation

- Radiation Treatment Volume
  - Head and neck (05)
- Regional Treatment Modality
  - Primary tumors and gross adenopathy generally receive 66-74 Gy at 2Gy per day
    - Patients receiving hyperfractionation may receive 80-81 Gy (80.3 at 1.15 Gy twice daily)
- IMRT dose painting
  - Different dose levels to different structures within the same treatment fraction

Chemotherapy

- Primary systemic therapy plus radiation for squamous cell carcinomas
  - Cisplatin
  - 5fu/hydroxyurea
  - Cisplatin/paclitaxel
  - Cisplatin/infusional 5fu
  - Carboplatin/infusional 5fu
  - Cetuximab

Nasopharynx

- Early stage tumors are primarily treated with radiation therapy.
  - This may be done in combination with a platinum based chemotherapy.
- Later stage tumors are primarily treated with radiation combination of chemotherapy and radiation.
Oropharynx

- T1 or T2 with N0 or N1 (tumor less than 4 cm and no more than 1 positive ipsilateral node):
  - Definitive radiation therapy or
  - Excision of primary with or without a unilateral or bilateral neck dissection or
  - Radiation therapy and systemic therapy (usually only when N1).

Oropharynx

- T3 or T4 (tumor greater than 4 cm or tumor invades specific structures surrounding the oropharynx) and N0 (node negative):
  - Concurrent systemic therapy and radiation therapy or
  - Surgery or
  - Induction chemotherapy followed by concurrent chemotherapy and radiation or
  - Multimodality clinical trials

Oropharynx

- T3-T4 (tumor greater than 4 cm or tumor invades specific structures surrounding the oropharynx) and node positive or any T and N2-N3 (lymph node greater than 3 cm or more than one lymph node involved):
  - Concurrent systemic therapy and radiation therapy.
  - Induction chemotherapy followed by chemotherapy and radiation therapy.
  - Surgery to the primary and neck dissection.
  - Multimodality clinical trial.
Hypopharynx

- Early T stage (T1 or a small T2) with negative lymph nodes.
  - Definitive radiation therapy
  - Partial Laryngopharyngectomy with selective neck dissection.

- T1 with positive nodes or T2 or T3 with any N.
  - Induction chemotherapy
  - Laryngopharyngectomy followed by radiation and possibly adjuvant chemotherapy
    - If lymph node negative, then selective node dissection
    - If lymph node positive, then comprehensive neck dissection including level VI
  - Concurrent systemic therapy and radiation therapy.
  - Multimodality clinical trials

- T4a and any N
  - Surgery and comprehensive neck dissection followed by chemotherapy and radiation or
  - Induction chemotherapy followed by concurrent chemotherapy and radiation of just radiation or
  - Concurrent systemic therapy and radiation therapy.
  - Multimodality clinical trials
Questions?

Coming up!

- 1/10/13
  - Bone and Soft Tissue
- 2/7/13
  - Central Nervous System

- Certificate phrase:
  - Throat Cancer

And the winners are....
THANK YOU!