Head and Neck Cancer: Quality Care

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What is Quality Care?

“Doing the right thing, at the right time, in the right way, for the right person, and having the best possible results”
What is Quality Care?

“The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge”
What is Quality Care?

“Crossing the Quality Chasm: A New Health System for the 21st Century” (IOM, 2001)

SAFE: avoiding injuries to patients from the care that is intended to help them

TIMELY: reducing waits and harmful delays for providers and patients

EFFECTIVE: providing services based on scientific knowledge to all who could benefit, and refraining from providing services to those not likely to benefit

EFFICIENT: avoiding waste (equipment, supplies, ideas, and energy)

EQUITABLE: providing care that doesn’t vary in quality due to personal characteristics (gender, ethnicity, location, socioeconomic status)

PATIENT-CENTERED: providing care that is respectful of and responsive to individual patient preferences, needs, and values
What is Quality *Head and Neck Cancer* Care?

**Safe:**
- Low complication rates and adverse events, etc.

**Timely:**
- Provide care prior to worsening symptoms and/or disease progression

**Effective:**
- Evidence-based, appropriate patient selection, appropriate outcomes

**Efficient:**
- Value = quality/cost, limited “waste”

**Equitable:**
- Limit variations in treatment, provide access to care to all patients

**Patient-Centered:**
- Needs assessments, symptom scores, QoL
A High-Quality Cancer Care Delivery System

Evidence Base to Inform Clinical Care

Workforce

Patient-Clinician Interactions

Patients

Learning Health Care Information Technology System

Accessible, Affordable, High-Quality Care

Quality Measurement (including patient outcomes and costs)

Performance Improvement and New Payment Models
Brent C. James, MD: “It is more important that you do it the same than that you do it ‘right’”

- Evidence-based Best Practice Guidelines
  - Establish consensus

- Blend Best Practice Guidelines Into clinical work flow
  - Clinical Care Pathways
  - Clinical Autonomy

- Allow for variance due to individual patient needs
  - Measure this variance and how it impacts quality of care

Identify areas in need of quality improvement
Clinical Practice Guidelines (CPGs)

• Consensus-based recommendations, formulated by expert multidisciplinary groups, based on the strongest available evidence

• Institute of Medicine (IOM) definition:
  – Statements that include recommendations intended to optimize patient care that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options
Head and Neck Cancer CPGs

- Often address only a few components of “quality” care:
  - **Effective, Safe, Patient-Centered**
- Can provide a very basic framework of quality care
Head and Neck Cancer CPGs

Prereferral Head and Neck Cancer Treatment

Compliance With National Comprehensive Cancer Network Treatment Guidelines

Carol M. Lewis, MD, MPH; Amy C. Hessel, MD; Dianna B. Roberts, PhD; Yunxia Z. Guo, BSE; F. Christopher Holsinger, MD; Lawrence E. Ginsberg, MD; Adel K. El-Naggar, MD; Randal S. Weber, MD

The cases being distributed among 10 other sites. Of the patients who presented with recurrent or persistent disease, 43.0% had prereferral care that was noncompliant with NCCN guidelines. Of these patients, 58.7% had inadequate surgical management, 15.2% were treated for the wrong diagnosis, 10.9% received inadequate adjuvant therapy, 4.4% received inadequate radiotherapy, and 10.9% refused indicated recommended treatment.

Results: A total of 368 consecutive new patients were identified, of whom 107 (18.9%) had persistent or recurrent disease. The average time from first presentation with initial symptoms to diagnosis among patients

Evidence-based Best Practice Guidelines

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Clinical Care Pathways (CCPs)

A multidisciplinary management tool/healthcare plan for a specific group of patients with a predictable clinical course, in which the different tasks by the patient, caregivers, and professionals involved in the patient care are defined, optimized and sequenced.

- Explicitly states the goals and key elements of care based on EBM guidelines, best practices and patient expectations
- Facilitates the communication, coordinating roles and sequencing of the care activities
- Aim to improve the quality of care, reduce risks, increase patient satisfaction and increase the efficiency in resource utilization
CCPs for Head and Neck Cancer

CCPs in H+N surgery have been shown to:

– Improve functional outcomes
– Decrease complications
– Decrease LOS
– Decrease resource utilization/"waste"
– Decrease cost of care
– Improve patient satisfaction?
– Improve provider satisfaction?

Cohen J et al, Arch Oto-HNS, 1997
Hanna E et al, Arch Oto-HNS, 1999
Chen AY et al, Arch Oto-HNS, 2000
Gendron KM et al, Arch Oto-HNS, 2002
Dautremont JF et al, J Oto-HNS, 2013
Yeung JK et al, Plast Recon Surg, 2014
Case Example

- 63yo male with T4aN2bM0 SCC of the glottis s/p total laryngectomy and primary TEP
  - Routine post-operative course
  - POD #7: d/c home with post-op instructions
  - POD #10: readmitted for mucous plugging
  - POD #12: d/c to skilled nursing facility
  - POD #14: presents to ER with “trach dislodgement”, readmitted
QUESTION

Why did this patient get readmitted to the hospital twice within 2 weeks of surgery?

A. Inexperienced and “nervous” young provider
B. Inability for patient to care for his new anatomy
C. Copious secretions
D. Failure of medical system to prepare patient and caregivers for appropriate post-operative cares
E. Inability of skilled nursing facility to care for laryngectomy patients
Root Cause Analysis

• The goal of the process is to find out:
  – *what* happened
  – *why* it occurred
  – *how* to prevent it from happening again

• A *process* and *tool* for identifying meaningful prevention strategies
Case Example

• What happened?
  – Readmission x 2 within 2 weeks due to inadequate cares provided by/for the patient

• Why did it occur?
  – Keep asking this question until you can no longer answer
  – Lack of:
    • patient education (preop and postop), social support, nursing care familiar with stoma cares, physician oversight and insight, lack of appropriate discharge equipment, lack of medical support upon discharge, poor case management involvement, etc....................
QUESTION

How best could we prevent this from happening again?

A. Address each issue identified separately and directly
B. Assume that this was a unique event and continue providing excellent care to subsequent patients
C. Develop/reinforce improved processes of care for all subsequent laryngectomy patients
D. Develop robust educational programs for hospital nursing staff as well as for outpatient facilities
### Clinical Pathway for Laryngectomy Patients

<table>
<thead>
<tr>
<th>Time</th>
<th>Teaching points</th>
<th>Clinical progression/ Interdisciplinary responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Op</strong></td>
<td>Discuss pain expectations</td>
<td>Patient able to make informed decision about best treatment option</td>
</tr>
<tr>
<td></td>
<td>Treatment Options</td>
<td>Patient is healthy/stable enough to go through with surgery</td>
</tr>
<tr>
<td></td>
<td>Document key elements for handoff</td>
<td>MD</td>
</tr>
<tr>
<td></td>
<td>Show Educational DVD: pre-op consent, what to expect in hospital, emergency planning – send home with video</td>
<td>• H&amp;P</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Order SLP consult</td>
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<tr>
<td></td>
<td></td>
<td>• Present at tumor board</td>
</tr>
<tr>
<td><strong>Post Op</strong></td>
<td>Inform about pain control options:</td>
<td>SP</td>
</tr>
<tr>
<td><strong>day 0</strong></td>
<td>Medication options, timing, routes of administration</td>
<td>• Pre &amp; post op A&amp;P and functional deficits</td>
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<tr>
<td></td>
<td>Incision cares:</td>
<td>• Permanency of tracheostoma and importance of stoma cares</td>
</tr>
<tr>
<td></td>
<td>Per MD orders, usually clean and apply ointment to avoid crusting</td>
<td>• Patient has support system available to help through this journey</td>
</tr>
<tr>
<td></td>
<td>Stoma cares:</td>
<td>• Functional communication options</td>
</tr>
<tr>
<td></td>
<td>Reinforce importance of patient stoma</td>
<td>• Pain expectations</td>
</tr>
<tr>
<td></td>
<td>Suctioning, saline bullets (as needed for thick mucous), spraying with water/saline</td>
<td>• Home medical supplies</td>
</tr>
<tr>
<td></td>
<td>Often increased suctioning needs immediately post-operatively</td>
<td></td>
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<tr>
<td></td>
<td>Make sure to explain what you are doing and why to the patient – remember, this is the first time they will be experiencing this type of airway irritation!</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Initiation of routine post-operative cares:</td>
<td>RN</td>
</tr>
<tr>
<td></td>
<td>DVT prophylaxis, NGT cares, etc.</td>
<td>• Read Pre-op note by Speech Pathologist in “Chart Review” Tab in EPIC:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>should include important information with implications for care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Maximize anti-nausea medications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Follow-up on routine post-operative labs and CXR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ensure appropriate position of feeding tube (if applicable)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Post-op check (hematoma, stoma patency, JP drain function, etc)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Make patient Acuity 3 until patient is independent - delegate other tasks to make sure education is completed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Enter comprehensive, clear post-op orders (Post Op Laryngectomy Order Set to be created) – including post op nausea and pain management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Order appropriate consults: nutrition, speech pathology, physical therapy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• F/u on routine post op labs and CXR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ensure position of feeding tube as necessary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Post op check and note</td>
</tr>
</tbody>
</table>
CCP for laryngectomy patients at MCW

- Has it made a difference? (N = 9)
  - Improved nursing satisfaction scores
  - Improved nursing knowledge scores
  - Improved patient satisfaction scores
  - Decreased unanticipated patient phone calls and f/u clinic visits
  - 1 readmission since instituting CCP
Evidence-based Best Practice Guidelines

Blend Best Practice Guidelines Into clinical work flow

• Establish consensus

Clinical Care Pathways

Allow for variance due to individual patient needs

• Clinical Care Pathways

Measure this variance and how it impacts quality of care

• Clinician Autonomy

Identify areas in need of quality improvement
The Measurement of Quality

- Measuring and improving the quality of health care is an increasingly important goal within our healthcare system:
  - Patients and the public requesting information on outcomes
  - Payers require health care systems to address variations in care
  - Implementation of pay-for-performance models
  - Credentialing agencies demand evidence that providers and hospitals meet certain performance standards
  - Certification boards are implementing new standards for MOC

- Driving the need to systematically measure, track, and improve the quality of surgical care
Quality Metric Development

• What makes a good quality metric?
  – Easy:
    • Is the metric reasonably easy to measure and analyze?
  – Accurate:
    • Does the metric measure the intended process/outcome?
  – Meaningful:
    • Does the metric truly capture what is felt to be quality care?
  – Useful:
    • Does the metric provide opportunity for change and improvement?
Quality Metric Development

- Structure, process, outcomes
- Multidisciplinary input and consensus
- Based on best available evidence, established guidelines, and best practices
- Include patient-centered, individual provider, and organizational/systems metrics
- Align with goals of care
S1. Data exists showing that high quality head and neck cancer care improves outcomes

A. True

B. False
S2. Data exists showing that high quality head and neck cancer care is more cost effective

A. True

B. False
Quality Metrics

• Quality Metrics/Indicators:
  – NCCN guidelines:
    • Dx, Tx, Surveillance, Management of recurrence
  – End-of-life care
  – LOS
  – Return to OR
  – Readmissions
  – Infection rates
  – Mortality rates
Quality Metrics

• Findings:
  – High-quality care (as defined by quality metrics) was associated with improved survival and lower costs of care for this patient population
  • No consistent pattern of predictor variables associated with high quality care
  – High-quality care for recurrent dz was associated with worse survival

Quality Indicators of Laryngeal Cancer Care in the Elderly

Christine G. Gourin, MD, MPH; Kevin D. Frick, PhD; Amanda L. Blackford, ScM; Robert J. Herbert, BS;
Harry Quon, MD; Arlene A. Forastiere, MD; David W. Eisele, MD; Sydney M. Dy, MD, MSc
- **Objective:** To create methods for assessing physician performance that are adjusted for procedure acuity and patient comorbidity
  - Examined procedures performed by 10 surgeons from 2004-2008
    - Stratified into high and low acuity procedures
    - Risk adjustment made for comorbid conditions
- **Quality Metrics Utilized**
  - LOS, Return to OR within 7 days, Mortality, Readmissions, Transfusions, Wound infections
- **Findings:**
  - Differences among surgeons significantly affect the incidence of negative performance indicators
  - Factors affecting performance measures were: procedure acuity, the surgeon, and comorbidity
- **Conclusions:**
  - Comorbid conditions and procedure acuity should weigh heavily in physician comparisons
Provider Scorecards

• Define quality metrics:
  – What should we ideally do for every patient with H+N cancer to ensure that they have the best possible outcome, independent of age, gender, tumor site or stage, comorbidities, etc?
    • “Every patient, Every time”
  – Ideal characteristics: **usable, feasible, and meaningful**

• Scorecard Concept:
  – Format provides an easy way to collect, view, and analyze data
  – Already a well-established tool for hospitals and health care systems

• Where are we now? Where to focus efforts in the future?
## Head and Neck Cancer Scorecard for Otolaryngology-Head & Neck Surgery

**Clinical Performance Report from 1/1/2012 to 12/31/2013**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Target Score</th>
<th>Surgeon A</th>
<th>Surgeon B</th>
<th>Surgeon C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Presented at tumor board prior to initiation of treatment</td>
<td>90</td>
<td>80</td>
<td>80</td>
<td>93</td>
</tr>
<tr>
<td>2. Time to get an appointment from time of consultation &lt;14 days</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>3. Time to initiation of treatment &lt; 3 weeks from initial appointment</td>
<td>78</td>
<td>80</td>
<td>67</td>
<td>67</td>
</tr>
<tr>
<td>4. Pathology formally reviewed at MCW if biopsy performed elsewhere</td>
<td>98</td>
<td>69</td>
<td>80</td>
<td>46</td>
</tr>
<tr>
<td>5. Documentation of cTNM stage in office notes</td>
<td>98</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>6. Smoking and alcohol cessation counseling documented</td>
<td>88</td>
<td>75</td>
<td>86</td>
<td>50</td>
</tr>
<tr>
<td>7. Dental plan documented</td>
<td>90</td>
<td>87</td>
<td>87</td>
<td>93</td>
</tr>
<tr>
<td>8. Flexible laryngoscopy or videostroboscopy performed for stage 3 or 4 disease</td>
<td>90</td>
<td>70</td>
<td>88</td>
<td>50</td>
</tr>
<tr>
<td>9. Follows NCCN guidelines</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>10. Documentation of margin status in office notes</td>
<td>98</td>
<td>93</td>
<td>87</td>
<td>100</td>
</tr>
<tr>
<td>11. Documentation of pTNM stage in office notes</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>12. Referral for multidisciplinary adjuvant therapy for stage 3 or 4 disease</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>13. Start of adjuvant therapy &lt; 7 weeks postoperatively (if applicable)</td>
<td>90</td>
<td>56</td>
<td>57</td>
<td>75</td>
</tr>
<tr>
<td>14. Readmission rate &lt; 30 days postoperatively</td>
<td>10</td>
<td>0</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>15. Multidisciplinary follow up when indicated</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>16. Thyroid function assessed within 1 year after radiation</td>
<td>90</td>
<td>25</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>17. Restaging imaging within 6 mo of therapy completion for stage 3 or 4 dz</td>
<td>90</td>
<td>88</td>
<td>83</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total Number of Metrics falling BELOW Target Goal:</strong></td>
<td>9</td>
<td>11</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

*Red = Falls below target goal*
Performance Improvement Modules

The MOC Part IV Performance Improvement Modules (PIM) guide the ABQoP Diplomate through the classic quality improvement cycle to identify strengths and areas for improvement in practice. The ABQoP Diplomate can select a module that matches his/her practice focus area. The ABQoP plans to develop two or three PIMs in each of the practice focus areas over the next few years.

The PIM consists of three stages: In stage A, the participant enters selected data about patients he/she has treated. The data points are based on accepted guidelines or measures. In stage B, the participant receives feedback on areas of strengths and areas that could be improved. In stage C, the participant enters data on new patients to demonstrate improvement. This process is non-punitive, and is used simply to provide useful feedback to the diplomate.

Currently, MOC participants are required to complete a PIM once every three to five years. The same PIM can be used each time, but new patient data will need to be entered. However, as ABQoP and other organizations change their requirements, the Part IV PIM may become a more continuous requirement.
ABOto MOC

Step IV: Oral Cavity Cancer PIM

• Guide member through classic Quality Improvement cycle to identify strengths and areas for improvement

• 3 Stages:
  – A: Enter patient data based on accepted guidelines and measures
  – B: Obtain feedback on areas of strengths and areas of potential improvement
    • Carry out intervention/improvement
  – C: Enter new patient data to demonstrate improvement
Brent C. James, MD: “It is more important that you do it the same than that you do it ‘right’”

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Thank You

Questions?