Training the Workforce of Today for the Challenges of Tomorrow

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LIANA PUSCAS, MD, MHS, DUKE UNIVERSITY, VICE CHAIR RRC
CRISTINA CABRERA-MUFFLY, MD, RESIDENCY PROGRAM DIRECTOR, UNIVERSITY OF COLORADO
WILLARD HARRILL, MD, FACS, CAROLINA EAR NOSE AND THROAT
ROLAND EAVEY, MD, CHAIR, VANDERBILT UNIVERSITY

NOVEMBER 10, 2018
Drivers of Education

Residency
- Department Faculty/Leadership
- ABOHNS

Clinical Practice
- Socioeconomic Factors/ Costs
- Technological/Medical Advances
- Structure of Medicine/Regulatory Changes
- ACGME/RRC
Otolaryngology Practice Settings

2017 AAO-HNS Socioeconomic Survey and AOA Practice Benchmarking Survey
Otolaryngology Practice Location

2017 AAO-HNS Socioeconomic Survey and AOA Practice Benchmarking Survey
Practice Strategic Initiatives - 2017

Looking to hire a new doctor: 80%
Looking to hire an ENT Nurse Practitioner: 50%
Looking to hire an Audiologist: 30%
Relocating any existing office locations: 30%
Opening any additional office locations: 40%
Looking to close existing office locations: 10%
Considering addition of new ancillary services: 20%
Considering purchase of new practice: 70%
Considering replacing an existing EHR system: 60%
Currently participate in a Clinically Integrated Network: 20%
Utilize patient satisfaction or patient outcomes: 50%

2017 AAO-HNS Socioeconomic Survey and AOA Practice Benchmarking Survey
Are there opportunities to better prepare our residents for success in contemporary practice?

- Liana Puscas, MD, MHS, Duke University, Vice Chair RRC
- Cristina Cabrera-Muffly, MD, Residency Program Director, University of Colorado
- Willard Harrill, MD, FACS, Carolina Ear Nose and Throat;
- Roland Eavey, MD, Chair, Vanderbilt University
Beyond the KIPs

LIANA PUSCAS, MD
DUKE UNIVERSITY
OTOLOGYNOLOGY RRC
Leadership as a core component of residency training

- To Train Tomorrow’s Leaders
  - Physicians are leaders by default; apply to all aspects of one’s life
- Leadership curriculum designed on basis of virtues:
  - Integrity
  - Initiative
  - Accountability
  - Self-discipline
  - Compassion
- People with the right character traits will do the right things
- 3 major components
#1: Leadership “Basic Training”

- Journal clubs
  - Faculty and resident participation/discussion
- Resident Focused Leadership Sessions
  - 5 week curriculum covering one topic each week
  - Articles focused on each of the five character traits (integrity, initiative, accountability, self-discipline, compassion)
  - Led by Dr. Walter Lee (BA in philosophy; focus in Ethics)
- Assessment of these qualities via open ended question on every rotation performance evaluation
Developed to capitalize on the intermingling of surgical residents in the smaller environment of the VA rotation.

Opportunity to include residents from other surgical disciplines focusing on issues common to all.

Now includes residents from anesthesia and emergency medicine.

Four sessions utilizing simulation of professionally challenging situations:

- Mentally impaired colleague
- Covering up bad outcome
- Research protocol deviations
- Lying about duty hours
- Lying about being ill
- Inebriated colleague
- Lying about duty hours
#3: Leadership Lived Out

- Year-long curriculum
- 360 assessment resulting in a spider graph that compares the participant’s perception with others’ perception; lengthy questionnaire
- Series of articles/book chapters
- Meet monthly to discuss the articles
- Personal coaching to aid in areas that are identified as areas for improvement
- Multi-disciplinary: nurses, SLP, audiologists, admin staff
- Residents participate at the PGY4 level
## Overall Leadership Curriculum

<table>
<thead>
<tr>
<th>Formal Leadership Curriculum</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
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<td>Leadership Basic Training (Residents)</td>
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<td>Resident Mentorship Meetings</td>
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<td>Faculty Led Forum on Leadership</td>
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<td>Kenan Lecture (Honors Mentor)</td>
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<td>Leadership Journal Club</td>
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<tr>
<td>Hudson Lecture (Leadership)</td>
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<td>Leadership Lived Out</td>
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<td>Individual Leadership Coaching Available</td>
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<tr>
<td>Operating as Leaders (VA)</td>
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</table>
Beyond KIPs – new directions for the RRC

- Project underway to reclassify CPT codes into a more anatomic, functional scheme
- Rename categories and improve organization so that the resident, the program and any credentialing or oversight body can easily see the breadth and depth of the surgical experience
- Goal is to utilize software to visually map a program’s experience; this alerts the program as to how they are doing compared to other programs
- Continue unbundling
Beyond KIPs – new directions for the RRC

Current

- Otology/Audiology
- Plastic/Trauma

New

- Area: Otology/External Ear
- Area: Otology/Middle Ear
- Area: Otology/Inner Ear
- Area: Otology/Skull Base
- Area: Plastic/Facial Appearance
- Area: Plastic/Reconstruction
- Area: Plastic/Trauma
Beyond KIPs – new directions for the RRC

**Current**
- Glossectomy
  - Only glossectomy codes included
- Stapes/OCR
- Mandible/Midface
  - Only ORIF CPT codes included
- Plastics: Flaps
  - Limited inclusion of flaps

**New**
- Oral Cavity
  - All CPT codes that involve oral cavity resection
- Ossicular Chain Surgery
- CMF (craniomaxillofacial)
  - Will include craniofacial approaches and maxillectomy
- Plastics: Reconstruction: Flaps
  - Much more expanded list (Abbe, cleft palate)
Questions and Comments?
The Other Curriculum:
Non-Medical Knowledge Topics

Cristina Cabrera-Muffly
Department of Otolaryngology
University of Colorado
What is required?

Per ACGME Otolaryngology Program Requirements:

- “Regularly scheduled didactic sessions”
  - “Cyclical presentation of core specialty knowledge”
  - “Grand rounds, quality improvement conferences, morbidity and mortality conferences, and tumor conferences”
- “Knowledge of the basic principles of research, including how research is conducted, evaluated, explained to patients, and applied to patient care.”
ACGME Required Topics

- “Basic sciences as relevant to the head and neck and upper-aerodigestive system
- Communication sciences (audiology, speech and language pathology, and the voice sciences)
- Chemical senses, endocrinology, and neurology, as they relate to the head and neck
- Allergy and immunology
- Anatomy
- Biochemistry
- Cell biology
- Embryology
- Genetics
- Microbiology
- Pathology
- Pharmacology
- Physiology
- Rhinology”
What is desired?


Anit T. Patel, MD, MBA; Richard M. J. Bohmer, MD, MPH; J. Robert Barbour, JD, MPS; Marvin P. Fried, MD

<table>
<thead>
<tr>
<th>Topic</th>
<th>Program Directors n (%)</th>
</tr>
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<tbody>
<tr>
<td>1. Correct coding</td>
<td>35 (12.6)</td>
</tr>
<tr>
<td>2. Planning your entry into</td>
<td>34 (12.3)</td>
</tr>
<tr>
<td>medical practice</td>
<td></td>
</tr>
<tr>
<td>3. Risk management issues</td>
<td>33 (11.8)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Topic</th>
<th>Recent Graduates n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Correct coding</td>
<td>109 (12.4)</td>
</tr>
<tr>
<td>2. Office management</td>
<td>83 (9.5)</td>
</tr>
<tr>
<td>3. Reimbursement issues</td>
<td>82 (9.4)</td>
</tr>
</tbody>
</table>
Anecdotally...

- “How do I decide between academics and private practice?”
- “How do I interpret the medical literature to provide evidence based patient care?”
- “How do I bill for a clinic visit?”
- “How do I avoid getting sued?”
Biggest Barrier
What We Do

- Professionalism Series
  - Yearly Topics
    - Sleep Deprivation and Fatigue
    - Quality Improvement and Patient Safety
  - Four year cycle
    - Basic Skills in Medicine
    - Research
    - Business of Medicine
    - Team Building and Leadership
Four Year Cycle

- Basic Skills in Medicine
  - CV Preparation
  - How to Give Bad News
  - Informed Consent
  - Interpreting the Medical Literature

- Research
  - IRB 101
  - Intro to Statistics
  - How to Write a Scientific Paper

- Billing and Coding
- Minimizing Legal Risk
- Improving Patient Satisfaction
- Negotiating Your First Contract

- Team Building and Leadership
- Giving Effective Feedback
- Maximizing mentor/mentee relationships
- Leading a Team
- Transitions of Care

- Business of Medicine
Tips for Success

- Ask your residents what they want.
- Block off time.
- Involve faculty with special interests.
- Obtain (and use) post session feedback.
Questions and Comments?
How Integral is OA to Otolaryngology?

- **Scope-of-Practice Surveys**
  - 2017 AAO-HNS Socioeconomic
    - 78%
  - 2017 AOA Benchmark
    - 78%
  - 2016 NC/SC Otolaryngology
    - 84%
  - 2018 AAOA
    - 92%

- **Otolaryngology**

- **RVU/Productivity Analysis**
  - OA #1 reported scope-of-practice
    - 1995 MEDSTAT Database
      - *Pillsbury et al*
      - *3x more than #2 (audiology)*
  - Physician Surveys
    - AAO-HNS Socioeconomic
      - 2014
      - 2017
Contemporary Otolaryngology Surveys

- **2018 AAOA Otolaryngic Allergy Survey**
  - 445 Responses
    - 1632 members surveyed
    - 27.3% response rate

- **2016 NC/SC Otolaryngology Society Survey**
  - Laryngoscope May, 2018
  - 109 Responses
    - 520 members surveyed
    - 21.3% response rate
of the 16% who did not provide allergy services, 64% were solo practitioners.
OA Education in Residency

- 1985 - **AO Minimal Residency Training Guidelines** proposed
- 1990 - **OA Home Study Course** developed by the AAOA
- 2004 - **Expanded Residency OA training requirements**
  - Otolaryngology Residency Review Committee (ORRC)
  - Accreditation Council for Graduate Medical Education (ACGME)
- 2013 - **ACGME Outcomes Project** – OA scope-of-practice
  - Resident
    - *Demonstrate Competency* to provide defined OA care
  - Residency Program
    - *Measure* the program’s *Effectiveness* on resident’s achievement of OA competency
<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
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</thead>
<tbody>
<tr>
<td>- Demonstrates familiarity with basic nasal anatomy and normal respiratory mucosa histology</td>
<td>- Demonstrates basic understanding of derangements in nasal anatomy and mucosal inflammation</td>
<td>- Demonstrates knowledge of histopathology of allergic rhinitis and anatomic factors affecting the nasal airway</td>
<td>- Demonstrates thorough understanding of anatomic impact of allergic inflammation on the nasal airway</td>
<td>- Demonstrates advanced understanding of allergy diagnostic testing</td>
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<tr>
<td>- Demonstrates familiarity with normal functions of nasal mucosa and nasal cavities</td>
<td>- Knows pathophysiology of allergic rhinitis (AR)</td>
<td>- Knows pathophysiology of non-allergic rhinitis</td>
<td>- Distinguishes presentations of allergic and non-allergic rhinitis patients; demonstrates knowledge of cellular and molecular features of inhalant allergy</td>
<td>- Is facile with multiple methods of immunotherapy</td>
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<tr>
<td>- Demonstrates limited knowledge of allergy work-up</td>
<td>- Describes comorbidities in AR</td>
<td>- Describes the natural history and components of severity in allergic disease</td>
<td>- Describes systems for AR subtype and severity (e.g., seasonal vs. perennial, intermittent vs. persistent, etc.) and incorporates knowledge of severity and natural history into patient management</td>
<td>- Demonstrates a working knowledge of immunotherapy for allergic disease</td>
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<tr>
<td></td>
<td>- Demonstrates familiarity with clinical presentations of allergic disease</td>
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<td>- Combines clinical features and test results to correctly diagnose allergic disease</td>
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</table>
Otolaryngic Allergy
Pathways to Competency

Upstream & Downstream Impact
AAOA: Self-Reported Years to Competency
*(Post-Residency)*

**Weighted Average**

5.8

**Standard Deviation**

3.75
AAOA: Perceived Value towards Allergy Competency

Weighted Average

Residency: 5.6
ABOto: 6.7
AA0-HNS: 6.5
AAOA: 8.9

P < 0.001

Upstream
Downstream
AAO-HNS Resident and Fellow Surveys

“Not enough Allergy Training during Residency”

63% 49% 51% 46% 48%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

2011 2012 2013 2014 2015

AAO-HNS Section for Residents and Fellows Annual Survey, unpublished data 2010-2015
Resident AAOA Membership

12.4% of US ENT Residents

1) Personal Communication Jami Lucas, AAOA
2) 2015 ACGME Data
Otolaryngic Allergy

Strategic Long-Range Planning

• **Shorten the number of years to competency**
  – Broaden the “**Upstream**” Educational Value/Experience
    • Earlier OA Resident Exposure
    • Expand Private/Academic OA Relationships
    • Increase Residency Directors utilization of AAOA Resident Free Membership Sponsorship Initiative
  – Study the Impact of Resident Work Hour Restrictions
    • Balance *Market* vs *Academic* driven priorities
Balancing Priorities

- **Upstream - filtered**
  - Tertiary Rhinology
- **Downstream - unfiltered**
  - General Otolaryngology
Otolaryngic Allergy

Future Considerations

• Sino-Allergy Home
  – Precision Health for Sino-Allergy disease
    • Scope-of-Practice Center of Excellence
      – Prediction & Prevention
      – Disease classification
      – Treatment
      – Monitoring
Questions and Comments?
Leadership Development for Residents

ROLAND EAVEY, MD
CHAIR, DEPARTMENT OF OTOLARYNGOLOGY
VANDERBILT UNIVERSITY
Questions and Comments?