Otolaryngology Residency Curriculum

SUO Meeting
November 4, 2022
Background

• Shared mission: training and graduating competent, professional otolaryngologists

• Challenges:
  • Increasing volume of material
  • Overwhelming resources of questionable quality
  • Lacking structured and standardized program
  • Disparity, especially smaller programs
SUO/AADO/OPDO

• Unique ability to foster change and strengthen resident education
• Standardized curriculum to span medical school to practice
  • Goals/objectives
  • Instructional methods
  • Learning resources
  • Assessment tools
• Surveys
  • OPDO
  • SRF
Residency Curriculum

• Surgical Specialties
  • Surgical Council on Resident Education (SCORE)
    • General surgery, vascular surgery, pediatric surgery
    • OMFS
  • Plastic Surgery CoreQuest curriculum
  • Resident Orthopedic Core Knowledge (ROCK) orthopedics

• Otolaryngology
  • The Intercollegiates Surgical Curriculum (ISCP) - UK
SUO/OPDO Curriculum Task Force

• Create standardized curriculum with input from all stakeholders
• Focus PGY-1
  • Part 1: Needs Assessment (modified Delphi Method) of stakeholders
  • Part 2: Prioritization of topics
  • Part 3: Initial topic development (n=10)

**KNOWLEDGE**
- Acute Airway (adult)
- Anterior Epistaxis
- Peritonsillar Abscess
- Tonsillitis (pediatric)
- Head & Neck Malignancy (red flags)

**SKILLS**
- Nasopharyngoscopy (NPL)
- Cricothyroidotomy
- Tracheostomy
- Peritonsillar Abscess Drainage
- Tonsillectomy
Current Status

• Much needed and valuable resource for PDs and residents
• Large undertaking
• Needs:
  • Administrative support
  • Copy editors
  • IT support for platform/website to house curriculum
• Next steps:
  • ? Develop de novo
  • ? Partnership SCORE
Use of the SCORE Platform for a National Curriculum in Otolaryngology

Amit R.T. Joshi, MD, FACS
Editor-in-Chief, SCORE
American Board of Surgery
Disclosures
History of SCORE

- Blue Ribbon Panel 2004
  - Workforce Issues
  - Undergraduate Surgical Education
  - Duty Hours
  - Residency Education, Structure, Support

American Surgical Association Blue Ribbon Committee Report on Surgical Education: 2004

Haile T. Debas, MD, Barbara L. Bass, MD, FACS, Murray F. Brennan, MD, FACS,
Timothy C. Flynn, MD, FACS, J. Roland Fols, MD, FACS, Julie A. Freischlag, MD, FACS,
Paul Friedmann, MD, FACS, Lazar J. Greenfield, MD, FACS, R. Scott Jones, MD, FACS,
Frank R. Lewis, Jr., MD, FACS, Mark A. Malangoni, MD, FACS, Carlos A. Pellegrini, MD, FACS,
Eric A. Rose, MD, FACS, Ajit K. Sachdeva, MD, FRCS, FACS, George F. Sheldon, MD, FACS,
Patricia L. Turner, MD, Andrew L. Warshaw, MD, FACS, Richard E. Welling, MD, FACS, and
Michael J. Zinner, MD, FACS

SCORE consortium forms


The Mission of SCORE

To improve the education of residents (trainees) in general surgery and related specialties through the development of a national curriculum.

Bell et al, SCORE: A new organization devoted to GME. JACS 2007
SCORE History

Curriculum outline starts


Beta testing of web portal
<table>
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- Establishment costs = $13 million / 18 years
  - Sweat Equity = $0
  - Programming / Hosting = $8 million
  - Employees = $5 million
SCORE Costs

- Annual costs = $2 million
  - Personnel = $600k
  - Programming / Hosting = $1 million
  - Licensing = $250k
- Annual Trainee Subscription = $175
- Annual Institutional Fee = $500
Annual Specialty Costs

- Self-service content = $50-100k
- Editorial Staff = $100-200k
- Textbook Licensing = $50-100k

200-400k

Subscription Revenue

Sponsoring organization

SCORE
Collaboration

$8-10 million
Textbooks
MCQs
Videos

$ Sweat Equity

$ WebADS Credit

Videos
MCQ webinars

Partner Organizations

Association of Program Directors in Surgery
Surgical Critical Care Program Directors Society

Society of Surgical Oncology
Association of Pediatric Surgery Training Program Directors
Content Organization

Competencies

MEDICAL KNOWLEDGE

CONTENTS

1. Anesthesia ........................................... 53
2. Biostatistics and Evaluation of Evidence ......................... 53
3. Fluids, Electrolytes and Acid-Base Balance ......................... 53
4. Geriatric Surgery and End-of-Life Care ......................... 54
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# Content Organization

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<td>Advanced</td>
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</table>
### 11. Alimentary Tract – Anorectal

#### Diseases/Conditions

**CORE**
- Anal Cancer
- Anal Fissure
- Anorectal Abscess and Fistulae
- Hemorrhoids
- Perianal Condylomas
- Rectal Cancer

**ADVANCED**
- Anal Dysplasia/Sexually Transmitted Diseases
- Fecal Incontinence
- Rectal Prolapse

#### Operations/Procedures

**CORE**
- Anal Fistulotomy/Seton Placement
- Anal Sphincterotomy - Internal
- Anorectal Abscess - Drainage
- Banding for Internal Hemorrhoids
- Hemorrhoidectomy
- Perianal Condylomas - Excision

**ADVANCED**
- Anal Cancer - Excision
- Anorectal Fistulae - Complex Repair
- Incontinence/Constipation - Operation
- Rectal Cancer - Abdominoperineal Resection and Pelvic Exenteration
- Rectal Cancer - Transanal Resection
- Rectal Prolapse - Repair
Anesthesia

Choice of Anesthesia

Resources

Text

www.acssurgery.com
Steven B. Backman, Richard M. Bondy, Alain Deschamps, Anne Moore, Thomas Schricker,
Section 1, Chapter 3: Perioperative Considerations for Anesthesia.

Mulholland et al: Greenfield's Surgery: Scientific Principles and Practice, 4e. Lippincott,
Williams & Wilkins, 2005.

Contributors

Learning Objectives: Thomas Cox and G. Richard Benzinger (Washington University School of
Medicine)

Learning Activities: Thomas Cox and G. Richard Benzinger (Washington University School of
Medicine)

Learning Objectives

1. Clinically relevant anatomy/histology
   Given a patient presenting for anesthesia and surgery, the resident can recognize, with minimal
   assistance, the anatomic abnormalities (airway, cardiopulmonary, musculoskeletal, etc.) that may
   impact the choice of anesthesia.
   ACS, sec 1 ch 3: Special Scenarios – (Difficult Airway)
   Greenfield, ch 12: (Figure 12.1)

2. Clinically relevant physiology, biochemistry, and molecular biology
   Given a patient presenting for anesthesia and surgery, the resident can review, with minimal
   assistance, the preoperative studies and recognize the physiologic or metabolic abnormalities pertinent
   to anesthetic management and drug metabolism (renal, hepatic, pulmonary, and cardiac function).
   ACS, sec 1 ch 3. (Perioperative Patient Management)
Editorial Board

- Few generalists → many specialists
- Educators
- Ambassadors
ABS Assessment

ABS Testing Blueprint

- In-training exam
- Written
- Oral
ABS Assessment

ABS Testing Blueprint
- In-training exam
- Written
- Oral

SCORE Curriculum Outline
469 Modules
The SCORE Portal

- Role-based viewing

Hello, Amit Joshi
Your Specialty is General Surgery, Edit

My Program

Specialty:
- General Surgery
- Oral and Maxillofacial Surgery
- Pediatric Surgery - Fellowship Level
- Surgical Critical Care - Fellowship Level
- Vascular Surgery - Fellowship Level
- Vascular Surgery - Integrated

User Type:

Program:
Thank you to the following individuals for their contributions to this week’s quiz: Abdulaziz Arishi, MD; Sukriti Bansai, MD; Lubomyr Boris, DO; Alpendre Cristiano, MD; Gopal Grandhige, MD; Cary Hsu, MD; Kai Huang, MD; Subhasis Misra, MD, MS; Benjamin Moran, MD; Ory Newman, DO; Youmna Sherif, MD; Daniel Vera, MD, and Candace Ward, MD, MPH.

**CORE**

- Gastrectomy - Partial/Total
- Vagotomy and Drainage
- Gastric Adenocarcinoma
- Peptic Ulcer Disease
- Gastroduodenal Perforation – Repair

**ADVANCED**

- Postgastrectomy Syndromes – Revisional Procedures
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Neck Trauma</td>
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<tr>
<td>Week 2</td>
<td>Ventral/Miscellaneous Hernias</td>
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<td>Week 3</td>
<td>Transfusion and Coagulation</td>
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<td>Week 4</td>
<td>Abdomen - General</td>
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<td>Week 5</td>
<td>Thermal Trauma</td>
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<td>Week 6</td>
<td>Arterial Oclusive Disease, Part 1 of 3</td>
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<td>Week 7</td>
<td>Critical Care, Part 1 of 3</td>
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<td>Week 8</td>
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<td>Week 15</td>
<td>Interpersonal Skills, Part 3 of 4</td>
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<td>Week 40</td>
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<td>Week 42</td>
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<td>Week 43</td>
<td>Plastics</td>
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Take a Quiz on Anesthesia

Select your quiz options:

Show Correct Answer:
- As soon as I submit my answer
- On the summary page at the end of the test

Number of Questions:
5 / 7 Available Questions

Discussion Questions

Question 1

A 76-year-old man with senile dementia is scheduled for a bilateral inguinal hernia repair. What are the options for anesthesia?

Key Discussion Points
- Describe the various options for anesthesia, including local with conscious sedation, regional techniques, and general anesthesia.
A 26-year-old woman with severe traumatic brain injury is in respiratory distress. She had a percutaneous tracheostomy 2 weeks ago (after being intubated for 3 weeks), and she had been breathing easily on a “trach” collar for the past 3 days with minimal secretions. Today, after a sudden coughing fit, she dislodged her tracheostomy tube. Her vital signs are:

- Heart rate: 120 beats/min
- Blood pressure: 140/80 mm Hg
- Respiratory rate: 35 breaths/min
- Oxygen saturation: 86% on “trach” collar

After unsuccessfully attempting to replace the tracheostomy, the nurse removes the tracheostomy tube, covers the tracheostomy site with an occlusive dressing, and begins bag-valve mask ventilation (BVM). The patient’s oxygen saturation continues to decrease. What is the most likely reason that BVM is failing?

The correct answer is: A
Right
- Internal carotid artery
- Superior thyroid vein and artery
- Internal jugular vein
- Middle thyroid vein
- Right inferior thyroid artery
- Right recurrent laryngeal nerves
- Right vagus nerve
- Brachiocephalic trunk
- Brachiocephalic veins

Left
- Hyoid bone
- Superior laryngeal nerve
- Thyroid membrane
- Thyroid cartilage
- Thyroid gland
- Pretracheal lymph nodes
- Left inferior thyroid artery
- Left recurrent laryngeal nerves
- Inferior thyroid veins
- Vagus nerve
- Aortic arch

(c) 2001 NLM.
Leveling the Playing Field

- Compare usage by program type & geography
  - SCORE usage by trainees in 246 subscribing programs
  - August 2015 to March 2017

Leveling the Playing Field

- Compare usage by program type & geography
  - SCORE usage by trainees in 246 subscribing programs
  - August 2015 to March 2017

SCORE Usage

- Compare usage and its impact on ABSITE
  - 8 programs, 428 trainees
  - 2017-2020

McGaha et al. Trainee Utilization of the SCORE Curriculum is Associated with Improved ABSITE Performance. *J Surg Edu* 2021
Increasing Access

Outcomes
Best Practice


- Self-Study
- Group Didactics
- Modules
  - MCQs
  - SCORE School
  - Clinical images
  - Radiology
  - Operative Videos
  - Anatomic Illustrations
  - Textbook Chapters
Pre-Intern Curriculum

**NOTE:** Welcome to SCORE! These modules have been selected to help you familiarize yourself with the SCORE portal and curriculum. The modules will complement other preparatory curricula that your medical school and/or training program have enrolled you in. You are encouraged to thoroughly review the learning objectives and embedded resources.

<table>
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<th>MODULES</th>
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<tr>
<td>Choice of Anesthesia</td>
<td>Postoperative Pain Management</td>
<td>Body Fluid Compartments and Fluid Homeostasis</td>
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<td>Common Postoperative Problems</td>
<td>Listening and the Surgeon-Patient Relationship</td>
<td>Obligations to Patients: Competence</td>
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<tr>
<td>Social Skills (&quot;Communication &amp; Teamwork&quot; and &quot;Leadership&quot;)</td>
<td>Admitting Mistakes - Ethical Choices and Reasoning</td>
<td>Working with Professionals Around You - Team Communication and Respect</td>
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<tr>
<td>Inspiring a Healthy Culture for Patient Care</td>
<td>Medical Errors and Apology</td>
<td>Giving and Getting Feedback</td>
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<td>Safe Handoff of Patient Care Duties</td>
<td>Diagnostic Approach to Infection</td>
<td>Best Practices in Prescribing Opioids</td>
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CCC Report

- The report pulls together multiple data reporting requirements into one downloadable .xls file for you.
- Much of the report will satisfy Milestones requirements.
- You pick the date range to meet your bi-annual CCC requirements.
Customizing a Remediation plan or assigning Rotation specific modules from PD view
Monitor resident access

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In-Training Study Plan

Breast/Endocrine/Soft Tissue/H & N
13 of 33 answered correctly. The topic areas for the incorrect answers are:

- Upper Airway Obstruction
- Cellulitis
- Thyroid Cancer
- Melanoma - Wide Local Excision
- Oncology and Tumor Biology
- Axillary Sentinel Lymph Node Biopsy and Lymphadenectomy
- Breast Cancer - Invasive Carcinoma (Ductal, Lobular, All Variants)
- Phyllodes Tumor of the Breast
- Radiation Therapy - Principles
- Breast Biopsy with or without Needle Localization
- Mastectomy - Partial
- Melanoma and Nevu
- Multiple Endocrine Neoplasias
- Thyroidectomy - Partial or Total
- Necrotizing Soft Tissue Infections
- Duct Excision of the Breast
- Atypical Lobular Hyperplasia and Lobular Carcinoma In Situ of the Breast
- Cricothyroidotomy
- Screening and Biomarkers
- Neck Mass - Evaluation
Specialty-specific timeline

Weekly Schedule  Weekly Quiz  Linked Lectures  Images  Videos  Link to In-training Exams

DEI  EPAs
Technical Work In Progress

- Analytics
- Mobile App
- Roster Management
- MCQ metrics
- TWIS customization
Social Media

- 350-750 impressions/day
What success looks like
Discussion

@AmitRTJoshi
AJoshi@surgicalcore.org