

# SCORE for General Surgery Residents: Pearls for Implementation

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General Session

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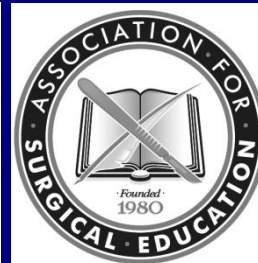
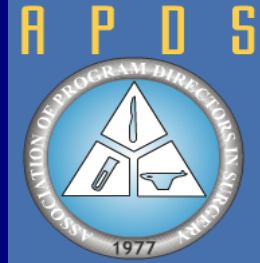


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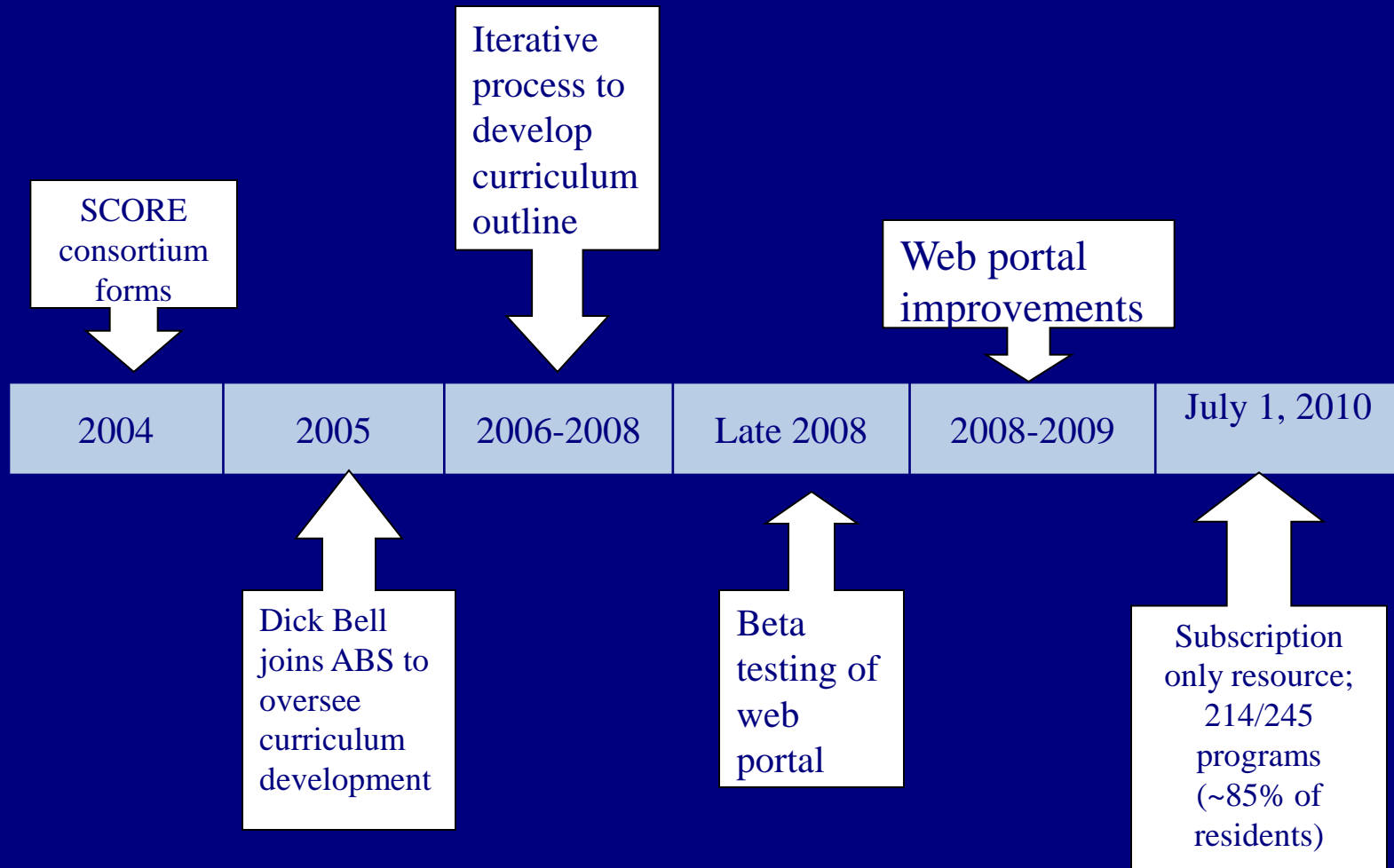
# What is SCORE?

- Consortium of seven major US-based surgical organizations



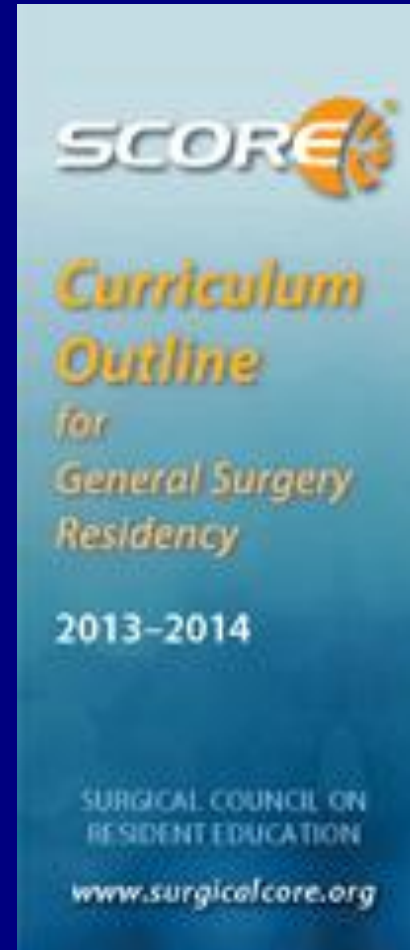
- Consortium collaborated to develop curriculum for surgical training
  - Developed over past 8 years
  - Currently delivered via web-based portal

# SCORE History



# SCORE

- SCORE web portal
  - Unified curriculum
  - Specific learning objectives
  - Curriculum revised and updated annually
  - Mobile accessible, easily searchable



[www.surgicalcore.org](http://www.surgicalcore.org)

# Current subscription status

<b>As of December 2013:</b>	<b>Programs</b>	<b>Residents</b>
US allopathic	245	9019
Osteopathic	39	274
Canadian	7	250
International	12	174
Vascular	14	55
Cardiothoracic	1	6
CT and OMFS	3	8
Totals	307	9717

# How programs are using SCORE

- Curriculum and “point of care” learning
  - Conceived as tool to support the core/required learning curriculum in residency
  - Increasingly used by residents for “on the fly” learning (before cases, in evaluating a consult, etc)
- Fulfill competency area requirements
  - Systems based practice
  - Professionalism, communication skills



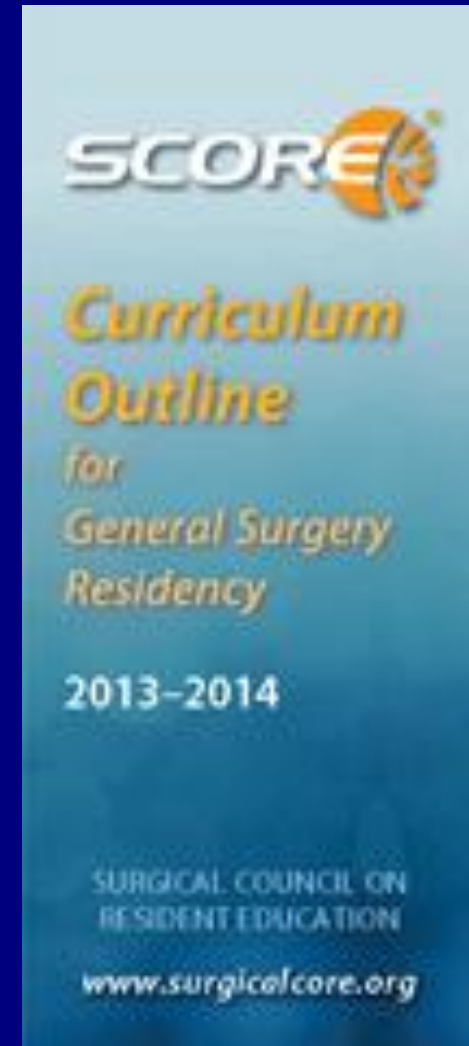
# Curriculum Areas

**Patient Care: 28 categories, 690 topics total**

- Diseases/Conditions
  - Broad (n = 203)
  - Focused (n = 204)
- Operations/Procedures
  - Essential-common (n = 76)
  - Essential-uncommon (n=63)
  - Complex (n = 144)

**Medical Knowledge: 13 categories, 78 topics**

**Curriculum is reviewed and modified annually**



# Diseases and Conditions

- Broad: graduate should be able to care for all aspects of disease and provide comprehensive management
- Focused: graduate should be able to make diagnosis, provide initial management/stabilization, but not expected to provide comprehensive care

# Operations/procedures

- Essential-common: frequently performed in general surgery; specific competency required by graduates (with case volume present during training)
- Essential-uncommon: rare, often urgent operations seen in gen surg practice but not typically done in significant numbers by trainees; specific competency required by graduates (but not obtained by training case volume alone)
- Complex: not consistently performed by general surgeons in training or practice. Some residency programs may provide sufficient experience for competency by graduates

# Relationship between SCORE and ABS exams

- Content outline for ABS exams now mapped to SCORE
- Areas of relative complexity are weighted appropriately
- Curriculum outline has helped focus exams
- No content in SCORE is on exams and vice versa
  - Firewall between these entities
  - Curriculum outline publically available

# Modules

- Each topic is organized into a module
- Defined learning objectives
- Open ended questions
  - Self study for resident
  - Lead point for discussion for faculty leaders
- Licensed textbook chapters
- Videos

# Current publisher content

- ▣ *ACS Surgery: Principles & Practice*
  - ▣ *Greenfield's Surgery: Scientific Principles & Practice*
  - ▣ *Fischer's Mastery of Surgery*
  - ▣ *Cameron's Atlas of Gastrointestinal Surgery*
  - ▣ *Norton's Basic Science and Clinical Surgery*
  - ▣ *O'Leary's Physiologic Basis of Surgery*
  - ▣ *Evan's Surgical Pitfalls*
  - ▣ *SAGES Manual, ASCRS Manual*
  - ▣ *Coran's Pediatric Surgery*
  - ▣ *Ethics and Palliative care textbooks from ACS*
- 
- ▣ *ACS Surgery Weekly Curriculum*
  - ▣ *Evidence Based Reviews in Surgery*
  - ▣ *Annals of Surgery Journal Club*
  - ▣ **COACH**
  - ▣ **STATdx® library of radiologic and anatomic images**
  - ▣ **Video library**

# How residency programs use SCORE

- Weekly curriculum/didactic conferences
- Deep dive independent learning (outside of conference topics)
- Preparation for In-Training exam
- “Point of care” learning to aid in patient management

# How residency programs use SCORE

- Support weekly didactic conference
  - Use internally developed sequence of topics
    - Assign via SCORE assignment feature or in-house notification system
  - Use ACS Surgery Weekly Curriculum sequence of topics
  - Module assignments, defined learning objectives, textbook reading/video viewing as “homework”
  - In conference discussion of learning objectives and open ended questions

# How residency programs use SCORE

- Deep dive independent learning (outside of conference topics)
  - Read textbooks, review learning objectives in modules
- Preparation for In-Training exam
  - Self assessment question feature
- “Point of care” learning to aid in patient management
  - Search terms

# Other features: resident-centric

- Self assessment, multiple choice questions
  - ~3000 total
  - Sources: retired ABSITE questions (with explanations), licensed from textbook publishers, older edition SESAP questions, peer review authored
- Supplemental resources

## Supplemental Resources

SCORE encourages use of these curricular and media resources to augment your surgical educational experience.



**STATdx** provides an extensive collection of anatomy imaging as well as evidence based diagnoses and differential diagnoses. STATdx is provided by SCORE partner Amirsys, Inc.

### Curriculum Tools



The **ACS Surgery Weekly Curriculum** is a convenient program that guides residents through an ongoing study of the key elements of general surgery from *ACS Surgery: Principles and Practice*. Each week's topics include a 4 or 5 question quiz, complete with immediate feedback.

The **ASTS Academic Universe** and the Transplant Curriculum for Surgery Residents is designed specifically for surgical residents during their rotation in transplant surgery. The modules cover key objectives in Abdominal Transplantation and offer a better understanding of topics such as immunobiology, immunosuppression, organ procurement and transplantation.

### Journal Clubs



**Evidence Based Reviews in Surgery** offers a set of clinical and methodological reviews can be accessed each month. EBRS is provided courtesy of the Canadian Association of General Surgeons.

The **Annals of Surgery Journal Club** is an interactive resource for surgery residents and surgeons to discuss and critically evaluate articles published in *Annals of Surgery* and selected by a monthly guest expert.



**COACH** is an on-line multimedia educational tool based on pre-training (providing users with training videos, articles, and simulations prior to being exposed to real-life situations). COACH is operated by the Columbia University Medical Center

# Other features: faculty centric

- Assignments
- Reports
- Suggested curriculum sequence
  - By PGY year
  - Sequence for each academic year
- Material for competency areas
  - Journal clubs
  - Systems based practice
  - Professionalism/ethics/communication

Search SCORE:

[Search](#)

## Reports

### Washington University Hospital B-JH/SLCH Consortium

58 residents

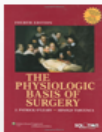
12 instructors

71 active assignments

#### Run a report:

- [Program Roster](#)
- [All Assignments](#)
- [Residents' Assignment Status](#)
- [Residents' Personal Progress](#)

## Featured Textbook



The Physiologic Basis of Surgery,  
4e

J. Patrick O'Leary, Arnold  
Tabuenca

[All Textbooks >](#)

## Featured Video



Hernia Repair, Inguinal;  
Laparoscopic

13 minutes, 18 seconds

[All Videos >](#)

## News & Announcements

### SCORE News

#### [Preparing for the ABSITE?](#) (1/13/2014)

Residents preparing for the upcoming ABS In-Training Examination (ABSITE...)

#### [New Content Added to SCORE](#) (1/3/2014)

Lots of new content just added! The SCORE Portal now features an additional 800 new...

[More SCORE News >](#)

### Program Announcements

[Residents can now track personal progress separate from assignments](#) (3/21/2013)

Your assignments and personal progress each have their own tracking tools now, so you can...

[More Program Announcements >](#)[Reports](#)[About](#)[Help](#)[Feedback](#)[Curriculum Outline](#)[News & Announcements](#)[Subscribe](#)

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SILVERCHAIR  
INFORMATION / SYSTEMS

# Subscription pricing

- Per program fee, per year
  - \$500
  - Includes PD, coordinator and 10 faculty
- Per resident fee
  - \$125 per resident per year
  - Increasing to \$145 for 2014-15
- All others are \$295 per year
  - Not currently offering individual subscriptions

# SCORE oversight

- SCORE executive leadership group
  - Frank Lewis, Mark Malangoni (ABS executive and associate executive directors)
  - Mark Hickey (IT lead, SCORE COO)
  - Mary Klingensmith (SCORE surgeon lead)
- SCORE Council
  - Seven member organizations
    - APDS, ASE, ACS, ASA, ACGME, RRC, SAGES, ACS-RAS
  - Twice yearly meetings for six years, now annual

# SCORE oversight

- SCORE Editorial Board
  - 8 member group, broad specialty representation
  - Responsible for peer review and updates of all material
  - Oversight, new directions, interface with constituent groups
  - In person meetings 2-3 times per year
- Resident Advisory Group
  - 8 residents, broad representation of type, location and size of residency
  - Provides frequent input on navigation, features, new directions
  - Aids in updating/authoring content
  - In person meetings 1-2 times per year

# SCORE finances

- Vast majority of funding to date has come from ABS reserves
  - Roughly \$1.5 million per year, net of other contributions from 2006-2012
- Other contributors
  - American Surgical Association
  - Association of Program Directors in Surgery
  - American College of Surgeons
- Currently self sufficient based on subscription revenues of almost \$1 mil

# SCORE expenses

- Salaries for two full time employees
- Web hosting, web development
- Licensing agreements
  - Publishers
  - Stat Dx
  - COACH
- All content development/review is done gratis
- All videos and journal clubs free external links

# Future Directions for SCORE

- SCORE 2.0
  - Launched March 2013
  - Semantic searches, better mobile interface
  - Responsive design in near future
- All competency areas
  - Professionalism, Communication, Practice -based learning and improvement
- ~65 additional modules
  - focused and complex diseases and operations/procedures
  - Complete June 2014
- New feature to navigate through all content in 2 years

# Future Directions

- Apps, better mobile accessibility
- New anatomical and surgical atlases
  - Radiology curriculum
- Expansion
  - Fellowships (pediatric surgery, vascular, surgical oncology)
  - Medical students
  - Surgeons in practice (CME/MOC)
- Assessment



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