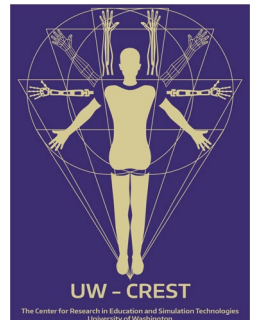




Taskforce Update: PGY-1 Curriculum Education Tools

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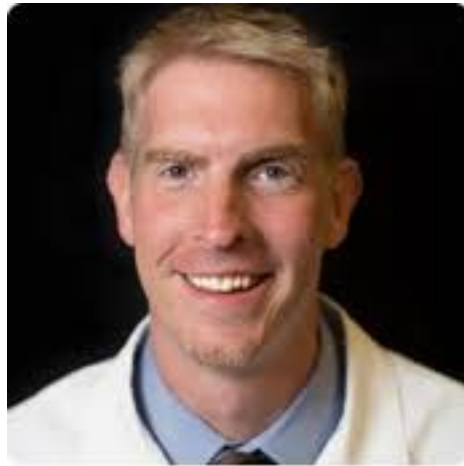
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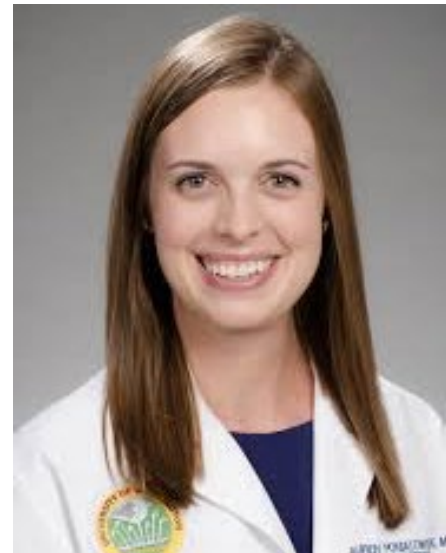
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CHARGE



- 1) Review the Common Program Requirements (CPRs) for the Urology Residency Program, especially with regard to the new PGY-1 training year
- 2) Develop a Common Assessment Toolkit (CAT) for SAU program directors regarding the PGY-1 Urology training, specifically
 - ✓ The goals and objectives for the PGY-1 urology trainee
 - ✓ The orientation and potential boot camp materials essential to the success of the PGY-Urology trainee
 - ✓ The faculty development necessary to train the PGY-1 Urology trainee
- 3) Render recommendations to the SAU board of directors regarding your analysis of the PGY-1 Urology training year.
- 4) Develop common tools for programs to succeed in the new Section VI of the CPRs

Process

- Review CPRs
- Gap Analysis
 - Cohort of PGY-2 residents attending Basic of Laparoscopic Urologic Surgery (BLUS™) course
- Refine Scope
 - Telecon
- Collection of PGY-1 curricula tools
- Compilation, prioritization and categorization of data
- Draft Report

Gap Analysis

- Cohort: 56 PGY-2s and 11 faculty facilitators attending BLUS™ course (Richstone, Veneziano)
- Venue: AUA Basic Laparoscopic Urological Skills (BLUS) Course
 - Thursday, June 7, 2018
 - Philadelphia, PA
- Methods:
 - Focus Groups with faculty members and PGY-2s discussed and collated responses related to the gaps in their PGY-1 training.
 - Formal collated report of open-ended responses provided by AUA.

Gap Analysis-Results

PGY-2 "Perceived gaps in **technical** skills training" for PGY-1s

– **Bedside procedures**

- Cystoscopic catheter placement
- Priapism management
- Point of Care Ultrasound (POCUS)
- Suturing/Knot-tying
- Female Pelvic Exam

– **OR procedures**

- Cystoscopy/stenting
- Tissue dissection
- Instrument Identification
- Tube Management
- Laparoscopic/Robotic assist

Gap Analysis-Results

- PGY-2 "Perceived gaps in **non-technical** skills training" for PGY-1s*
 - Patient safety event reporting
 - Ethics
 - Professionalism training from **EXPERTS (not residents)**
 - Formal patient communication training from **EXPERTS**
 - De-escalation
 - Managing pain control
 - Managing psycho-social issues
 - Formal interprofessional team communication training from **EXPERTS**
 - De-escalation
 - Closed-loop communication
 - Shared mental models
 - Leadership Transfer
 - CUS language

*Required in new **Section 6 of CPR**: Consider adding Quality Improvement processes training

Gap Analysis-Results

- PGY-2 Perceived gaps in “logistical training” for PGY-1s
 - Formal OR orientation
 - Formal EMR orientation
 - Organized off-hours list of resources

Gap Analysis-Results

- PGY-1 Resources available to address gaps
 - Technical skills
 - Most (but not all) programs have box trainers for fundamental skills
 - Few programs have partial task trainers
 - Some (but not all) programs have access to at least 1 animal lab session
 - Very few programs use manikins
 - Some (but not all) programs have access to at least 1 cadaver lab session
 - Some (but not all) programs have access to a DaVinci robotic simulator
 - Several programs described a competency based curriculum (90%) to “ticket” to OR
 - Very few programs using validated **assessment** tools/modalities other than milestones
 - OSATS/CSATS
 - GEARS
 - GOALS

Key finding: VARIABILITY amongst programs

Gap Analysis-Results

- PGY-1 Resources available to address gaps
 - Non-Technical skills
 - None describe use of Standard OSCE exams during PGY-1 year.
 - Only one program described a formal TEAM STEPPS program.
 - Not using manikins for this (though other specialties do)

Key finding: VARIABILITY amongst programs

Gap Analysis-Results

- PGY-2 perceived **barriers** of PGY-1 year
 - Lack of 24-hours access to simulation centers
 - Lack of protected time for faculty to teach and residents to learn
 - Money (almost all mentioned this)
 - Faculty-buy-in (almost all mentioned this)
 - Culture
 - Valuable feedback
 - Low case-numbers

Gap Analysis-Results

- PGY-2 recommended solutions to barriers
 - Formal curriculum
 - More protected time for faculty and residents
 - Just-in-time OR evaluations
 - More funding devoted to program
 - Access to training centers/resources

Collection of R-1 Curricula/Tools

University of Washington
University of Minnesota
Johns Hopkins University
University of Michigan
Hofstra/Northwell

Compilation, prioritization and categorization of data-Methods

- Committee members consulted with Program Directors and submitted PGY-1 materials.
- Materials were compiled and reviewed by several committee members and prioritized as it relates to relevance for the CPRs for Urology.
- Materials were categorized into
 - Cognitive/decision making skills
 - Psychomotor skills
 - Nontechnical skills (Communication/Professionalism)

ACS APDS

Phase 1

Course Outline

- Module 1: Asepsis and Instrument Identification
- Module 2: Knot Tying
- Module 3: Suturing
- Module 4: Wound Closure and Skin Flaps
- Module 5: Skin Grafts
- Module 6: Urethral Catheterization
- Module 7: Airway Management
- Module 8: Chest Tube Insertion
- Module 9: Central Line Insertion
- Module 10: Surgical Biopsy
- Module 11: Laparotomy Opening and Closure
- Module 12: Basic Laparoscopy Skills
- Module 13: Advanced Laparoscopy Skills
- Module 14: Hand-Sewn Bowel Anastomosis
- Module 15: Stapled Bowel Anastomosis
- Module 16: Arterial Anastomosis

Target Audience

Residents early in their surgical training

Phase 3

Learning Objective

Upon completion, the learner will be capable of working in teams to ensure successful patient outcomes across a variety of topics.

Course Outline

- Module 1: Teamwork in the Trauma Bay
- Module 2: Postoperative Hypotension
- Module 3: Laparoscopic Crisis
- Module 4: The Preoperative Briefing
- Module 5: Laparoscopic Troubleshooting
- Module 6: Postoperative Pulmonary Embolus
- Module 7: Postoperative MI (Cardiogenic Shock)
- Module 8: Latex Allergy Anaphylaxis
- Module 9: Patient Handoff
- Module 10: Retained Sponge on Postop Chest X-Ray



AMERICAN COLLEGE OF SURGEONS
Inspiring Quality: Highest Standards, Better Outcomes

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Results-Cognitive/decision making

- Patient and workplace safety
- Understand general preoperative assessment concerns
- Understand pain management strategies
- Know protocols for unresponsive and agitated patients
- Understand respiratory management
- Understand and demonstrate principles of nutritional support
- Understand and perform fluid and electrolyte management
- Understand and appropriately recognize cardiac conditions
- Know the environmental causes for urologic malignancies, risk factors for stone disease, risk factors for urinary tract infections

Results-Cognitive/decision making

- Knowledge of fundamental radiation safety, laser safety, OR safety protocols
- Foundation of knowledge within the field of urology
- Identify and manage common perioperative complications (e.g. DVT, post-operative fever, cardiac arrhythmia, ileus, SSI) and begin to relate these to urology-specific conditions (e.g. tachycardia following RPLND)
- Identify normal and abnormal laboratory, imaging and other diagnostic results
- Identify and know the management of emergent perioperative and urologic conditions
 - Fournier's
 - Testicular torsion
 - Septic, obstructing stone
 - Trauma
 - Priapism
 - Pulmonary Embolism
 - Post-op MI
 - UroSepsis

Results-General Psychomotor skills

- Open Skills
 - Instrument ID and Handling
 - Knot-tying
 - Two handed knots including surgeon's knot
 - One handed knots
 - Tie on a passer/suture ligature
 - Tie in a hole/cavity
 - Suturing
 - Simple interrupted
 - Horizontal mattress
 - Vertical mattress
 - Running, simple, subcuticular
 - Interrupted subcuticular
 - Pursestring



Results-Urology-specific psychomotor skills

- Routine and difficult placement of foley catheter
- Rigid and flexible cystoscopy/stenting
- Percutaneous and open SPT placement
- Cystoscopy bladder biopsy
- Basic Ureteroscopy
- Cystolitholopaxy
- Corporal irrigation for priapism
- Adult circumcision
- Hydrocelectomy
- Orchiectomy
- Male and Female Pelvic Exam
- Basic Laparoscopy (BLUS)

Results-Nontechnical skills (ACS)

- Communicate effectively with patients and families
 - Communicate directly and via other team members
 - Working knowledge of urology patients
 - Familiarity with family/friends and dynamics
 - Strategies for code status discussions, DPOA, etc.



Results-Nontechnical skills (ACS)

- Discriminate various psychological stress responses to illness
 - Identify and address patient and family needs
- Comply with HIPAA and patient confidentiality
 - Complete all required training
 - Demonstrate compliance at all times

Results-Nontechnical skills (ACS)

- Demonstrate GU exam sensitivity and potential need for additional considerations including asking permission to examine, need for chaperone, explaining the examination.
- Demonstrate ability for basic counseling of patients on common urologic conditions (e.g BPH, urinary incontinence, erectile dysfunction, stone disease)
- Write and communicate accurate discharge instructions, medications, activity restrictions and follow up details including timing/imaging/labs to be ordered
- Knowing names of staff members with regular interaction
- Actively teach, communicate with, advocate for, and include medical students.
- Demonstrate ability to say “I don’t know”

Recommendations for PGY-1s

- **Formalize the curricula**

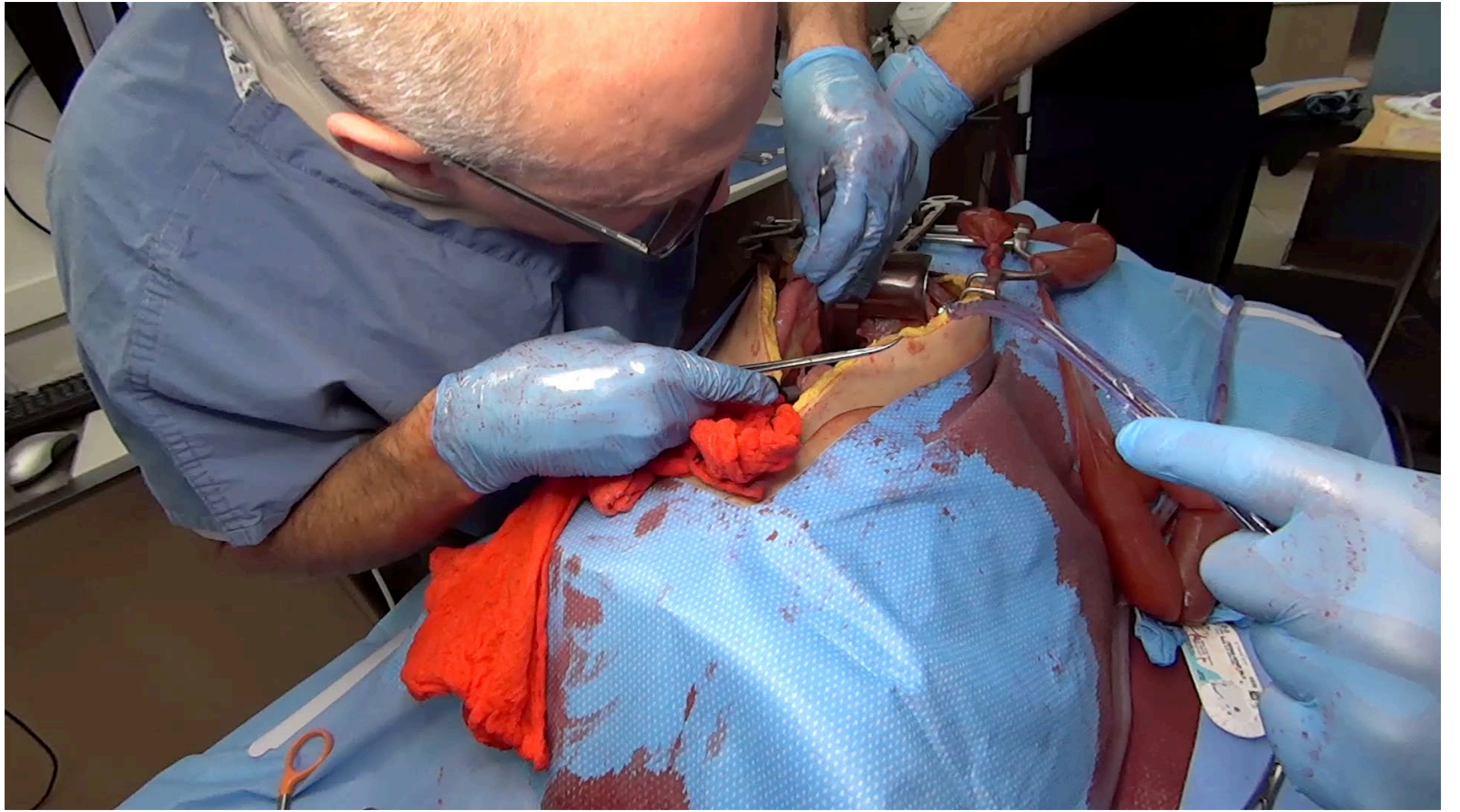
- Adopt all or part of the **ACS APDS Phase 1,3** (some of this may be more appropriate for PGY-2)
 - <https://www.facs.org/education/program/resident-skills>
- In addition: Incorporate findings from this report after vetting with broader SAU
- Make it competitive/fun (Make Gold, Silver, Bronze levels of achievement)

- **Mandatory use of formative assessments**

- OSATS, GEARS, GOALS, checklists, CSATS, Data-driven simulators

Recommendations for PGY-1s

- If available use **models** with validity evidence for PGY-1s
 - **Mandate the use of a simulated “model”** and add “access to facilities and models for independent practice” to the list of ***Resources***
 - Leave *type* of open/flexible to the individual program
 - Should at least consider leveraging
 - Non-technical skills: **TEAM STEPPS**, Standardized patients, in situ techniques and *full human simulators*
 - Technical skills: Synthetic simulators, animal tissue, cadavers





THANK YOU!

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