American College of Surgeons UME/GME Tools

ACS/APDS/ASE Resident Prep Curriculum (Students)

ACS Entering Residency Readiness Assessment (ERRA)

ACS Fundamental of Surgery Curriculum (FSC)



ACS/APDS/ASE Resident Prep Curriculum

Strengthen MS4 Education

Med School Graduates Better Prepared

Improved Patient Safety



ACS/APDS/ASE Resident Prep Curriculum

- 23 modules
 - Patient Assessment
 - Communication
 - Professionalism
 - Basic Skills
 - Etc



ACS Entering Resident Readiness Assessment (ERRA)

Formative assessment focused on <u>decision-making at PGY-1 level</u>



- Psychometrically rigorous, addressing focused areas for resident preparedness
- Forms include 40 cases that assess 12 Main Clinical Areas and 20 Topics (1-3 hours)
- Score reports provide data at individual resident and cohort (program) level for comparison with other participating <u>programs nationwide</u>
 - Reports identify specific areas of strength and aim to <u>facilitate learning</u> through ILPs between PD and resident
- Since its launch in 2018, more than 3,600 residents from across 152 general surgery residency programs have participated nationwide.



ACS ERRA OVERALL RESULTS

Each clinical case is worth up to 1 point and all cases are weighted equally.

The highest possible total score is 40 points.

Your ACS ERRA score is:

| 28.5 | The standard error of measurement is 1.09. Therefore, your mean score of 28.5 is accurate within |
|--|---|
| You correctly made 71.4% of the decisions in the 40 cases scored on the assessment. | ± 1.09 points—a score ranging between 27.5 and between 29.6 . |

The average score for all residents who took the 2022 ACS ERRA is:

| 26.12 | The standard deviation is 3.03 (or 7.5% for the |
|-------------------------|---|
| (of 40, or 65% correct) | percentage score); 68% of all test takers' raw scores were between 23.09 and 29.15. |



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2022 ACS ERRA RESIDENT REPORT



Resident:

ACS ERRA Score: 28.5 of 40, 71.4% Correct

| | Potentially | Over the | Levels of Your Performance (PercentCorrect) | | | | | | | | | National ^c Percent Correct |
|--|---------------------------------|--------------------------------|---|-----------|-----------|-------------|------------|-------------|--------|--------|------|---------------------------------------|
| Clinical Topic Area | Harmful Actions ^a | Response Limit ^b | <30% | 30-39% | 40-49% | 50-59% | 60-69% | 70-79% | 80-89% | 90-99% | 100% | (n = 840 Residents) Mean (SD) |
| Acute kidney problems | | | | | | | | | | | | |
| - Anuria - no urine output | 0/3 | 0 | | | | | | | | Х | | 71% (19) |
| Oliguria – low urine output | 0/4 | 0 | | | | | X | | | | | 66% (17) |
| Acute mental status change | | | | | | | | | | | | |
| - Combative/hallucinating | 0/2 | 0 | | | | | | | | | X | 70% (21) |
| - Somnolence | 0/1 | 0 | 1 1 | | | | | | X | | | 73% (17) |
| Acute neurological changes/deficits | | | | | | * | | | | | | 3 |
| - Secondary to ischemia | 0/2 | 0 | | | | | | X | | | | 66% (17) |
| Blood pressure changes | | | | | | | | | | | | |
| - Hypertension | 1/3 | 0 | | | | X | | | | | | 66% (23) |
| - Hypotension | 0/3 | 0 | 1 1 | | | | | | | х | | 75% (21) |
| Chest pain | | | | | | | | | | | | |
| – Chest pain | 0/0 | 0 | | | | | | | | | х | 73% (21) |
| Electrolyte imbalance | | | | | | | | | | | | |
| Electrolyte derangement | 1/3 | 0 | | | | | х | | | | | 61% (21) |
| Fever | | | | | | | | | | | | |
| - Infection | 0/2 | 0 | | | | | | | | | X | 61% (21) |
| - Interactions, reactions | 0/1 | 0 | | | | | X | | | | | 61% (24) |
| - Specific causes | 1/3 | 0 | | X | | | | | | | | 66% (20) |
| Glucose imbalance | | | | | | | | | | | | |
| Management of abnormal blood glucose | 0/2 | 0 | | | X | | | | | | | 61% (26) |
| Heart rhythm changes | | | | | | | | | | | | |
| - Irregular heartbeat | 1/3 | 0 | | | | | Х | | | | | 54% (17) |
| Ischemic extremity | | | | | | | | | | | | |
| - Cold leg | 0/2 | 1 | | | | | | X | | | | 64% (19) |
| - Secondary to injury | 0/0 | 1 | 1 1 | | | | | | X | | | 66% (17) |
| Pain assessment & management | | | | | | 1 | | | | | | |
| Abdominal pain (non-incisional) | 2/3 | 1 | X | | | | | | | | | 57% (22) |
| - Non-abdominal pain | 0/4 | 0 | | | | | | | | | X | 69% (21) |
| Respiratory compromise | | | | | | | | | | | | |
| - Change in respiratory rate | 0/3 | 0 | | | X | | | | | | | 60% (22) |
| - Hypoxemia | 0/2 | 1 | | | | | X | | | | | 66% (18) |
| | Dis | stributions of | Resider | t Perform | ance on O | verall Asse | ssment (Pe | rcent Corre | ect) | | | |
| National ^c (N = 840 Residents) | : | | 0% | 0.4% | 2.1% | 17.9% | 50.7% | 27.0% | 1.9% | 0% | 0% | 65% (7.5) (Range: 30 – 86%) |

^{*}Potentially Harmful Actions: Number of potentially harmful actions taken compared to the total number of potentially harmful actions in the case identified by the reviewers.

^bExcess Responses: Number of responses in excesss of the allowable limit as defined in the case(s).

^{&#}x27;National values are based on all residents who took the 2022 ACS ERRA.



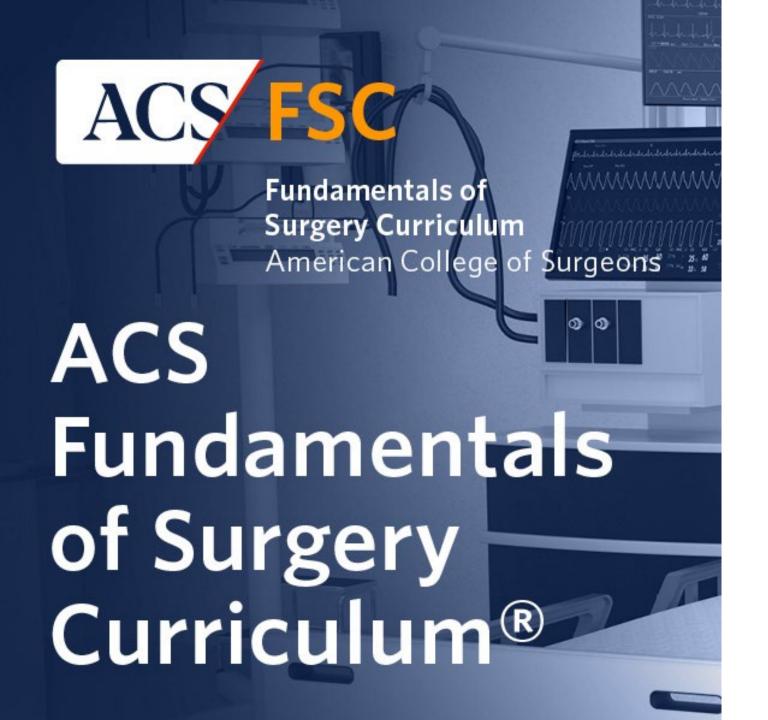
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POTENTIALLY HARMFUL ACTIONS

Because these actions represent potential safety concerns, if the resident report indicates that any potentially harmful actions were taken in any of these Clinical Topic Areas, we recommend that goals and actions around these be included in the residents' individual learning plans.

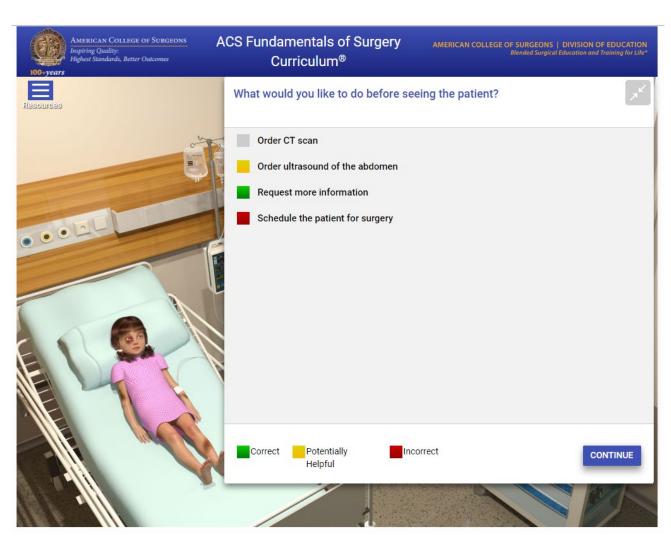
| Clinical Topic Area | Potentially Harmful Actions |
|--|--|
| Acute kidney problems | |
| – Anuria – no urine output | Mismanaging electrolytes in patients with renal insufficiency Ordering overly aggressive resuscitation |
| Oliguria – low urine output | Over-investigation to determine cause Inappropriately managing blood pressure |
| Acute mental status changes | |
| Combative/hallucinating | Failing to recognize underlying (medical) causes Using inappropriate treatments of medical causes |
| - Somnolence | Failing to recognize etiology resulting in over-treatment or over- investigation |
| Acute neurological changes/deficits | |
| Secondary to ischemia | 1. Failing to recognize impending CVA |
| Blood pressure changes | |
| - Hypertension | Failing to recognize etiology, resulting in wrong or delayed treatment Ordering overly aggressive treatment |
| - Hypotension | Failing to act for urgent etiologies Failing to recognize etiology, resulting in wrong or delayed treatment |
| Electrolyte imbalance | |
| - Electrolyte derangement | Failing to recognize signs of critical derangements Ordering excessive (unnecessary) investigation Failing to treat critical values |
| Fever | |
| - Infection | Failing to accurately identify fever source |
| - Interactions/reactions | Prescribing a wrong/contraindicated medication |
| – Specific causes | Failing to accurately identify fever source Over-investigation to determine cause Failing to recognize and treat unusual causes of fever |
| Glucose imbalance | |
| Management of abnormal blood glucose | Prescribing the wrong route of administration for medications Prescribing the wrong medication based on acuity |
| Heart rhythm changes | |
| - Irregular heartbeat | Using inappropriate cardioversion |
| Ischemic extremity | |
| - Cold leg | 1. Prescribing IV and/or PO anticoagulants that do not match patient acuity |
| Pain assessment & management | |
| Abdominal pain (non-incisional) | Ordering excessive investigation for non-operative etiologies Ordering incorrect investigation for operative etiologies Failing to act for emergent etiologies |



- \$248/resident
- Enrollment opens March 17, 2023
- Available to PGY1 residents
- Complimentary admin account to track resident progress



ACS FSC Fundamentals of Surgery Curriculum American College of Surgeons





108 Case Scenarios – 14 Critical Content Areas

- Patient and Workplace Safety
- Preoperative Assessment
- On-Call Issues
- Pain Management
- Unresponsive and Agitated Patients
- Respiratory Management
- Cardiothoracic Conditions

- Gastrointestinal Conditions
- Wound Management
- Nutritional Support
- Fluid and Electrolyte Management
- Cardiac Conditions
- Vascular Conditions
- Oncology

Summary/Discussion

 ACS (Specialty Academy) has convened/developed multiple tools for improving the UME/GME transition

? Do other specialty academies have similar offerings?

What is the business model?