Residency Mechanics: What Faculty Need to Know
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Definitions:
- Accreditation Council for Graduate Medical Education (ACGME) – accredits & monitors allopathic programs via their Residency Review Committee for Emergency Medicine (RC-EM or most call it RRC) based on the Program Requirements
  - Program Information Form (PIF)
  - Accreditation Data System (ADS) – computer based data system updated annually with monitoring information for program regulations
- American Osteopathic Association (AOA) – accredits & monitors osteopathic programs via their Residency Evaluating Committee (REC) based on the basic standards of EM
  - Crosswalk Workbook

Sample Faculty Information sheet for site visit:
1. Institutions:
   a. Sponsoring institution is generally the primary clinical site
      i. They pay a majority of the residents salary & benefits
      ii. This should also have the primary administrative space for the program
      iii. Must have training programs in other major specialties to show educational commitment
   b. Primary Clinical site (more didactics & clinical experience must be here)
      i. ED volume – >30,000(variety of trauma, medical, OB/GYN, pediatrics)
      ii. Admit rate; critical care rate - 3% minimum; (ICU admit, OR or morgue)
      iii. Throughput - discharged pts 4 hrs max & admits 8 hrs max
      iv. Ambulance diversion (closed ED)
   c. Participating Clinical site – all others in which residents formally rotate
      i. ED – volume (% of pts are pediatrics; % trauma etc.)
         1. AOA allows ED volume of >15,000 for secondary sites
      ii. Admit rate %; ICU rate %; OR or morgue %
      iii. Provides a different experience than primary ED in what manner
      iv. Throughput for: discharged pts – <4 hrs & admits – <8 hrs
      v. Ambulance diversion (closed ED)
   d. Program Letter of Agreement (PLA) – between program & each participating site
   e. Affiliated University – Medical school affiliation is desirable (residents are resident clinical instructors, faculty have faculty appointments)
   f. In ED – key points:
      i. Progressive responsibility – more patient care autonomy, more supervision of students, more administrative responsibility
      ii. Supervision – overlap of shifts and supervision of students & interns by senior EM residents; always supervised by EM faculty.
      iii. Presence of rotators does not limit patients for EM residents
2. Faculty
   a. Program Director
      i. ACGME - Must have 3 years as core faculty member in ACGME program
         1. Must work no more than 20 hours clinically/week
      ii. AOA – Must have 3 years as full-time faculty or 5 years EM experience
         1. Must be compensated for at least 12 hrs/wk non-clinical time
   b. Associate/Assistant Director (required for both)
      i. Must work no more than 24 hrs/wk (ACGME)
      ii. ACGME - Need 1 for 18-35 residents, 2 for 36-53, 3 for >54
      iii. AOA – Must be compensated for 8 hrs/wk non-clinical time; Need 1 if >32
   c. Coordinator (now required for ACGME)
      i. Need 1 FTE for <31, 1.5 for 31-45, 2 for 46-60, 2.5 for 61-75, 3 for >76
   d. Core Faculty
      i. ACGME - required to do no more than 28 hours/week scheduled clinical hours; AOA – must be compensated for 4 hours/week non-clinical time
      ii. Program Director (counts as core faculty member only sometimes)
      iii. ED site coordinators (if more than one site)
      iv. Must be 1 core faculty member for each 3 residents (4 for AOA, 50% DO)
   e. ED Chair – must be a member of core faculty (AOA – cannot be PD)
   f. Clinical Faculty – all others who teach in the ED
      i. Shifts not done with non-EM boarded physicians
         1. Peds ED faculty (must be ABEM/AOBEM-boarded to supervise)
   g. Faculty scholarly activity
      i. "Graduate medical education must take place in an environment of inquiry and scholarship in which residents participate in the development of new knowledge, learn to evaluate research findings, and develop habits of inquiry as a continuing professional responsibility. The staff as a whole must demonstrate broad involvement in scholarly activity."
      ii. Peer-reviewed publications – ACGME –20% of the faculty published per year over 5 years. This means that over 5 years, the program must have the same number of peer-reviewed publications as number of core faculty. AOA – not specified.
      iii. ACGME - Each core faculty member must do something in one of the columns each year – or have a minimum of 5 activities over 5 years. AOA – 2 major or 1 major & 2 minor over 4 years

<table>
<thead>
<tr>
<th>Name</th>
<th>Peer Publication</th>
<th>Non Peer Publication</th>
<th>National/Regional Presentations</th>
<th>Editorial Review Services</th>
<th>National committee membership/leadership</th>
<th>ACGME - Total (across must equal 5)</th>
<th>AOA - Total (2 major or 1 major &amp; 2 minor)</th>
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<tbody>
<tr>
<td>John Smith</td>
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<td>AOA only</td>
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<td>Jane Doe</td>
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h. Faculty Development
   i. Yearly goals must include this
   ii. EM Faculty must have growth opportunities in program
   iii. University faculty development programs
   iv. CORD conference & ACEP Teaching/Research fellowship

3. Rotations
   a. ED rotations & EM supervised rotations (EMS, Tox, Admin) – minimum of 60% of clinical experience in the ED (new ACGME requirements)
   b. Off-service rotations–
      i. Duty hours and appropriate supervision are carefully monitored by EM even on other services’ rotations.
      ii. New rotations – e.g. good to mention that these were to correct an identified weakness during the annual program review or graduate survey
      iii. At least 2 months of critical care rotations – those in intern year do not count as resident may not have “decision making experience.”
      iv. Must have experience in out-of-hospital care (EMS) – 1 month for AOA
      v. AOA – IM/subspecialty – 2 months, Trauma & Ortho, Surgical subspecialty – 2 months, Admin -1 month, OB (50%)& GYN -1 month
   c. All must have competency based goals & objectives & assessment of these at the end of the rotation (not just rotation summary evaluation)
   d. Must have 5 months equivalent peds time or 20% Peds volume in ED

4. Curriculum
   a. Weekly conferences
      i. 5 hours per week required ACGME (4 hours AOA)
         1. 20% or 1 hour/week can be independent interactive instruction
      ii. Less than half must be done by residents (ACGME – 50% by faculty)
      iii. All services “should” allow residents to attend lectures
      iv. Resident attendance - ACGME – 70%; AOA – all unless excused
      v. Faculty attendance – ACGME – 20%; AOA – 33%
   b. Scholarly project -
      i. Can include book chapters, journal articles, clinical projects, educational modules
         1. ACGME – Must have an “experience in scholarly activity”
         2. AOA – Must have a project suitable for publication 6 months before graduation
   c. Portfolios (kept by residents or in EM office)
      i. Things the resident learned & proof of it – anything else residents want to show their performance/education
   d. Other
      i. Procedure numbers & Resuscitation numbers (see below)
         1. Minimum required by RRC is often number to graduate
      ii. Moonlighting – not allowed for PGY-1 (hours must be monitored)
         1. No in-house moonlighting in the ED in which they train
5. Specific Curriculum topics
   a. Recognizing fatigue – lectures on sleep deprivation, shift work etc, sending you home from conference after call
   b. QI – performance quality improvement – project required of each resident & actively participate in hospital QI & patient safety programs
   c. Hand overs & Transitions of Care
   d. EMS base station calls
   e. AOA – ATLS, ACLS, APLS or equivalent

<table>
<thead>
<tr>
<th>Scholarly Activity – 2007-2010</th>
<th>Completed Projects</th>
<th>Abstracts*</th>
<th>Publications (Peer Reviewed)</th>
<th>Publications (Non-Peer Reviewed)</th>
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<td>Basic Science Research Projects</td>
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<td>Clinical Research Projects</td>
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<td>Textbook Chapters</td>
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<td>Collective Review Articles</td>
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<td>Case Reports</td>
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<td>Other (Specify):</td>
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<tr>
<td><strong>Educational Research/Innovation</strong></td>
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<td>Guest editorial</td>
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(*presented regionally &/or published)

6. Evaluations
   a. Daily or monthly evaluation in the ED
   b. Monthly summary evals
   c. Monthly assessments for topics learned during off-service rotations
   d. Measurable competencies for each PGY year (resuscitation, procedural, chief complaint)
   e. Resident evals of the off-service rotations
   f. Resident evals of ED faculty
   g. 360 degree evals – Faculty, Self, Peer, Nursing evals
   h. Semi-annual evaluation
   i. Overall program review
   j. Certification examination performance
      i. ABEM – 80% grads (past 5 yrs) who take the exam 1st time must pass

7. Summative evaluations
   a. Milestones (ACGME) – 23 domains grouped in the core competencies
      i. Level 1 (medical student grad) thru Level 4 (residency grad) & Level 5 (practicing physician)
      ii. Assessments –developed (SDOT, Procedural competency), some needed
      iii. Must be determined & documented by Competency Committee 6 months
   b. Program Director’s Annual Evaluation Form (AOA summative evaluation)
      i. Competency-based tasks for annual evaluation
# Total average number of Procedures and Resuscitations by Graduating Class

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Patients</th>
<th>In Lab (≤ 30%)</th>
<th>Minimum required</th>
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<tr>
<td></td>
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<td></td>
<td>ACGME</td>
</tr>
<tr>
<td>a. ED Bedside Ultrasound</td>
<td></td>
<td>200?</td>
<td>40</td>
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<tr>
<td>b. Cardiac pacing</td>
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<tr>
<td>c. Central Venous Access</td>
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<tr>
<td>d. Chest Tube Insertion</td>
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<tr>
<td>e. Procedural Sedation</td>
<td></td>
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<td>15</td>
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<tr>
<td>f. Cricothyrotomy</td>
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<td>3</td>
<td>3</td>
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<td>g. Dislocation Reduction</td>
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<tr>
<td>h. Intubations</td>
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<td>35</td>
<td>35</td>
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<tr>
<td>i. Lumbar Puncture</td>
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<td>15</td>
<td>15</td>
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<tr>
<td>j. Pericardiocentesis</td>
<td></td>
<td>3</td>
<td>3</td>
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<tr>
<td>k. Vaginal Delivery</td>
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<td>10</td>
<td>10</td>
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<tr>
<td>l. Cardioversion/Defib</td>
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<td>10</td>
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<tr>
<td>m. Closed fracture reduction</td>
<td></td>
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<td>20</td>
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<tr>
<td>n. Splinting</td>
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<td>20</td>
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<tr>
<td>o. Intraosseous line</td>
<td></td>
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<td>3</td>
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<tr>
<td>p. Laceration repair</td>
<td></td>
<td>--</td>
<td>50</td>
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<tr>
<td>q. Osteopathic Manipulation</td>
<td></td>
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<td>30</td>
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<tr>
<td>r. Thoracotomy</td>
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<tr>
<th>Type of Resuscitation</th>
<th>Patients</th>
<th>Lab</th>
<th>Minimum required</th>
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<tr>
<td></td>
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<td>ACGME</td>
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<tr>
<td>Adult Medical and Nontraumatic Surgical</td>
<td>45</td>
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<tr>
<td>Adult Trauma</td>
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<tr>
<td>Pediatric Medical*</td>
<td>15</td>
<td>15</td>
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<tr>
<td>Pediatric Trauma*</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

* Ages 0 - 18 years.
References:

1. Allopathic EM residency programs
   b. Guidelines for above


3. Curriculum – EM Model of Clinical Practice
Residency Mechanics

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Disclosure of Commercial Relationships

- None
- No Off-Label Disclosures

Objectives

- Describe the process by which all residency programs are accredited.
- Discuss the regulations that govern the curriculum of an emergency medicine residency program.
- Identify faculty guidelines, including those specific to emergency medicine.
Why Do We Care?

• Residency programs are expected to adhere to myriad guidelines and regulations to properly train residents and maintain accreditation.
  • Understanding these guidelines allows faculty to more effectively contribute to the program and to the department.
  • Knowing this gives a faculty member an insider’s view of how their interests can better intersect with departmental needs for opening up career opportunities faster and easier.

What are we talking about?

• Accreditation Council for Graduate Medical Education (ACGME) accredits & monitors allopathic programs via the RRC-EM

• American Osteopathic Association (AOA) accredits & monitors osteopathic programs via the Residency Evaluating Committee (REC)

PIF???, Crosswalk???

• What is the PIF?
  • Program Information Form - data sheet to be filled out for the RRC accreditation review
  • It is the form that asks for a description of how the program accomplishes the EM Program Requirements
  • The equivalent for the AOA programs is the Crosswalk Workbook
  • This describes how the program accomplishes the Basic Standards for Residency Training in Emergency Medicine
What are the rules?

Look at these before starting!

- PIF relates directly to Program Requirements
- Guidelines = RRC ‘suggestions’ (listed on web)
  - Procedure numbers
  - Resident duty hours specific for EM
  - Faculty staffing numbers & max clinical time
  - Faculty scholarly activity

Institutions

- Sponsoring Institution
- Primary Clinical Site
- Participating Clinical Site
- Program Letter of Agreement (PLA) – between each program & each participating site
  - Identify the faculty who will assume both educational & supervisory responsibilities for the residents
  - Specifics of rotation (location, duration etc.)
  - Content of Educational Experience
  - Policies & Procedures

Patient Population

- Total # of ED patients (>30,000)
  - % Adults
  - % Peds (20% or other experiences)
- Total number per clinical condition
  - trauma, surgical (non-trauma), medical, OB/GYN, psych
- Percentage seen of total patients
  - admitted (not Obs), Unit (not step down), OR, deaths
- Key aspects of ED
  - Progressive responsibility
  - Supervision
Faculty

- Program Director
  - Responsible for all the program
  - 3 years experience as core faculty member
  - Work clinically no more than 20 hours/week
- Head of EM (Dept. Chair/Chief)
  - Experience as administrator
  - Level of responsibility (organizational charts)
  - Methods to resolve ED admission disputes
  - Participation in institutional policy making

Core & Clinical Faculty

- Core Teaching Faculty
  - Current professional activities (committees etc)
  - Scholarly activities - past 5 years (new chart*)
  - Individual job description
- Other Teaching Faculty
  - Name, Boards certification, years of experience
  - Describe core faculty development opportunities
- Residency Coordinator (new this year)
Supervision

- Resident supervision in ED
  - ACGME stipulates ABEM/AOBEM only
- EM faculty staffing hours/day
  - min. 4.0 pts/faculty
  - Evidence of progressive responsibility

Block Rotation Schedule

Rotations

- EM rotations – minimum of 60% of clinical experience in the ED
- At least 2 months of critical care – where resident has decision making experience
- Must have 5 months of Peds experience or 20% Peds ED volume
Resident Duty Hours

• List of duty hour questions
• Describe how residents/faculty are educated to recognize fatigue
• Must include program’s moonlighting policy

Curriculum

• Conference
  • ACGME - 5 hours per week, though 1 hour may be Independent Individualized Instruction
  • AOA – 4 hours per week
• Established programs
  • Percentage of formal conference presented by:
    • EM faculty – 50% by EM faculty
    • Conference attendance by resident & faculty
  • ACGME - minimal 70% & 20%
  • AOA – all unless excused & 33%

Curriculum – Specific topics

• Procedures (see guidelines on web*)
• Patient follow-up
• Out of hospital care (EMS experience)
• Major resuscitations (see guidelines)
• Special topics
  • Fatigue
  • QI
  • Transitions of Care
Procedure & Resuscitation Guidelines

GUIDELINES FOR PROCEDURES AND RESUSCITATIONS

- Adult medical resuscitation: 45
- Adult trauma resuscitation: 35
- Cardiopulmonary resuscitation: 03
- Chest tubes: 10
- Central venous access: 20
- Procedural sedation: 15
- Pericardiocentesis: 03
- Percutaneous LV puncture: 15
- Vaginal delivery: 10

* See Procedure Competency Guidelines

Resident Scholarly Activity
(in the past 3 years)

<table>
<thead>
<tr>
<th>Scholarly Activity</th>
<th>Submitted Projects</th>
<th>Abstracts</th>
<th>Publications (First 2 Years)</th>
<th>Publications (One Year)</th>
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<tbody>
<tr>
<td>Basic Research Projects</td>
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<td>Case Reports</td>
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<td>Manuscript</td>
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<td>Total</td>
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Evaluations
- Residents
- documentation of resus, oral/written exams
- semi-annual evaluation
- details of plan for resident on formal remediation
- Faculty
- evaluated annually by Chair with PD input
- resident evaluations
- Program
- entire program, curriculum, rotations
- ABEM – 80% grads pass 1st time
Measureable Competencies

• “Describe how your program teaches & evaluates...”
  - Systems-based practice, professionalism, ethics
  - Interpersonal skills & communication skills, incorporation of new medical knowledge, medical errors
• “Describe the program’s measurable competency objectives for...”
  - Each year of residency
  - 3 chief complaints, 3 procedures, 1 type of resuscitation
  - Off service rotations

Summative Evaluations

• ACGME
  - Measureable Competencies
  - Milestones
• AOA
  - Program Director’s Annual Evaluation Form
  - Competency-based tasks for annual evaluation

Next Accreditation System:

• Very similar to data submitted by EM programs that were previously in the “pilot” program
• Data given yearly likely will include:
  - Updates from citations & changes in program
  - Procedure numbers
  - Graduates board scores
  - Resident & faculty survey
  - Updated faculty CVs & other information in ADS
  - Milestones (more later)
Changes for Institution:

- Frequent “surprise” site visits
  - approx. every 18 months with a two week warning
  - Usually on a specific topic – e.g. patient safety issues
- Much more emphasis on GME office having close oversight of programs
- Institutional citations rather than program
- Programs will have some type of internal review, but it has not been defined yet

Milestones:

- Milestones:
  - “A behavior, attitude or outcome related to general competencies that describe a significant accomplishment expected of a resident by a particular point in time.”
  - In English – a measure of something that you expect a resident to do at a certain time in residency
    - After the anesthesia rotation, the EM resident is expected to know how to intubate an uncomplicated patient.
    - By the end of residency, the EM resident is expected to know how to intubate a patient who has a difficult airway.

Milestone Reporting Template

<table>
<thead>
<tr>
<th>Milestone: (e.g. Communication with patients and families)</th>
<th>PGY1</th>
<th>PGY2 &amp; 3 (R1&amp;2)</th>
<th>PGY3 &amp; 4 (R2&amp;3)</th>
<th>Graduating Residents (end of PGY 5) (R4)</th>
<th>Practicing Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry – Baseline, expected level at time of entry into residency</td>
<td>Mid-Program</td>
<td>Mid-Program</td>
<td>Mid-Program</td>
<td>Graduation</td>
<td>Stretch Goals</td>
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<tr>
<td>Milestone: Developmental levels of performance</td>
<td>Offers road map and assurance that residents are attaining appropriate educational goals</td>
<td>Offers road map and assurance that residents are attaining appropriate educational goals</td>
<td>Offers road map and assurance that residents are attaining appropriate educational goals</td>
<td>Expected level of performance at entry into unsupervised practice</td>
<td>Exceeds expectations</td>
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<tr>
<td>Graduation</td>
<td>Level required to gain eligibility for ABMS certification</td>
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Comments:
### Standardized Direct Observation Tool

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<tr>
<th>Category</th>
<th>Description</th>
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<td>Task 4 details</td>
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<td>Task 5</td>
<td>Task 5 details</td>
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### Procedural Competency Form

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<td>Details 4</td>
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<tr>
<td>Section 5</td>
<td>Details 5</td>
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(Continue filling in details as per the form's structure)