Resident Evaluation in the Next Accreditation System

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### Activity

#### Creating Outcome-Based Evaluation Tools Worksheet

<table>
<thead>
<tr>
<th>Competency</th>
<th>Current Assessment Tools</th>
<th>Who evaluates the resident?</th>
<th>At what time is the resident evaluated? How often?</th>
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</thead>
<tbody>
<tr>
<td>Patient Care</td>
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Session Goals

• Understand the ACGME requirements for Resident Evaluation

• Understand the ACGME requirements for Clinical Competency Committee and Program Evaluation Committee

• Identify gaps in your program evaluation system

• Identify resident assessments required to fulfill ACGME requirements for Resident Evaluation in your program

• Understand assessment tools with utility for resident evaluation in the core competencies
## Formative vs. Summative Evaluation

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<tr>
<th><strong>Formative Evaluation</strong></th>
<th><strong>Summative Evaluation</strong></th>
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<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>Determine value or quality</td>
</tr>
<tr>
<td><strong>Use</strong></td>
<td>To improve the program</td>
</tr>
<tr>
<td><strong>Audience</strong></td>
<td>Program Managers/Staff</td>
</tr>
<tr>
<td><strong>By Whom</strong></td>
<td>Internal Evaluators</td>
</tr>
<tr>
<td><strong>Characteristics</strong></td>
<td>Feedback for improvement</td>
</tr>
<tr>
<td><strong>Constraints</strong></td>
<td>What info needed? When?</td>
</tr>
<tr>
<td><strong>Purpose of Data Collection/Frequency</strong></td>
<td>Diagnostic/Frequent</td>
</tr>
<tr>
<td><strong>Questions</strong></td>
<td>What is working? Needs improvement? How?</td>
</tr>
</tbody>
</table>

| **Purpose**              | Determine value or quality |
| **Use**                  | Decisions about program future |
| **Audience**             | Administrators/Policy Makers/Funders |
| **By Whom**              | External Evaluators |
| **Characteristics**      | Info for Decision Making |
| **Constraints**          | Evidence needed for major decisions? |
| **Purpose of Data Collection/Frequency** | Judgmental/Infrequent |
| **Questions**            | Results? With whom? Cost? |
Evaluation in the NAS

1. Resident Evaluation Requirements
2. Clinical Competency Committee Requirements
3. Program Evaluation Committee Requirements
ACGME Requirements: Resident Evaluation

1. Required Resident Evaluation Types
   a. End of rotation
   b. Core Competencies by Year in Program
   c. Milestone Review
   d. Case/Procedure Logs

2. Evaluators of Residents
   a. Faculty
   b. Peers
   c. Medical Students
   d. Patients/Families
   e. Self
   f. Other Professional Staff

3. Resident Evaluation Frequency
   1. End of rotation/educational experience
   2. Semi-annual
   3. Summative (Graduation)
ACGME Evaluation Requirements: Resident Evaluation

Formative evaluation:

• Must use multiple evaluators (e.g. faculty, peers, patients, self, and other professional staff)

• Document progressive resident performance improvement appropriate to educational level

• Provide each resident with semiannual evaluation of performance with feedback (including Milestone Review)
ACGME Evaluation Requirements: Resident Evaluation

Summative Evaluation

- The specialty-specific Milestones must be used as one of the tools to ensure residents are able to practice core professional activities without supervision upon completion of the program.

- Summative evaluation must:
  - Be a part of resident’s permanent record
  - Document resident’s performance during the final period of education (6 months)
  - Verify that the resident has demonstrated sufficient competence to enter practice without direct supervision
Resident Performance

- Rotation Evaluation (Evaluation Type)
- Global Evaluation (Assessment Instrument)
- New Innovations Report (Data Source)
- Descriptive Statistics (Data Analysis)

Elements of an Evaluation Assessment
Milestone Reporting

• When:
  • Semi-Annual Evaluation
  • Semi-Annual Milestone Report directly to ACGME

• Evaluation Conducted By:
  • Clinical Competency Committee
The Clinical Competency Committee

(CCC)
Milestone Review: Clinical Competency Committee

- Members: Core Faculty Members, non-MD educators

- Program Director Role: CCC Member, bears final responsibility for resident evaluation and promotion

- Role of the CCC:
  - Review and use current assessment data
    - Faculty, Self, Peer, Med Student, Patient, Multi-rater, etc.
  - Determine Individual Resident performance ratings
  - Identify residents who are not progressing and determine interventions (remediation, probation)
Milestone Assessment

- A desire for objective methods of assessment and provide better feedback
- Provide a process for early identification of residents that are having difficulties
- A desire to encourage innovation
Clinical Competency Committee³

- Several evaluators are better than one
- CCC Representatives from participating sites
- Representatives of subspecialties
- Manageable membership
- Subcommittee for large residency programs
The Clinical Competency Committee should:

- review all resident evaluations semi-annually;
- prepare and assure the reporting of Milestones evaluations of each resident semi-annually to ACGME, and
- advise the program director regarding resident progress, including promotion, remediation, and dismissal.
Clinical Competency Committee

How the CCC does its work may be decided by the Program Director

- Subcommittees
- Assigning residents to faculty members for pre-review
- Pre-review work will vary
- Some CCCs meet more than twice a year
Clinical Competency Committee

- The program director’s role on the CCC (chair or member)
- The program coordinator’s role on the CCC (non-voting)
- Non-physician role (non-voting)
- Advisor role (non-voting)
- Residents and fellows cannot be members of the CCC
The Resident’s Milestone Level is Determined by the Clinical Competency Committee

- A group of faculty members looking at the Milestones
- The same set of eyes looking at other evaluations:
  - End-of-rotation
  - Nurses
  - Patients and families
  - Peers
  - Others
- The same process is applied uniformly
- Allows for more uniformity and less individual bias
How Do we Assess Milestone Levels?³

• Milestones are not assessment tools to be used for gathering detailed information

• They do not replace end-of-rotation forms, simulation, multi-source evaluations, Objective Structured Clinical Examinations (OSCEs), which are completed by individuals

• More pieces of data allow for more precision
How do we Assess Milestones Levels?

- Milestones are a summary of how a resident is progressing.
- We have to gather data to be able to decide on how residents progress on the milestones.
- Some subcompetencies may be more amenable to monthly, quarterly, or semi-annual global rating scales, some may be collected once during the entire program.
Assessment Issues

- Can the Milestones Report replace current assessment tools or end-of-rotation evaluation forms?
  - Pros: when it is relevant and fits the situation; when it is understood by the evaluator
  - Cons: when Milestones language is too broad or general or does not apply to the experience; too many milestones to assess
The Program Director must prepare and assure the reporting of Milestones evaluations of each resident semi-annually to ACGME.

- Milestones are reported directly through ADS.
- Reporting windows are:
  - November – January
  - May - June
Clinical Competency Committee

- Operative Performance Rating Scales
- Mock Orals
- End-of-Rotation Evaluations
- ITE
- Self Evaluations
- Sim Lab
- Case Logs
- Unsolicited Comments
- Student Evaluations
- Clinic Workplace Evaluations
- Patient/Family Evaluations

Assessment of Milestones
What Should a CCC Do First?

1. Learn your specialty Milestones
2. Decide how to assess the Milestones
3. If necessary, identify new evaluation tools from program director associations, societies, colleges
4. Faculty members should:
   a. Discuss definitions and narratives
   b. Agree on the narratives
   c. Learn about assessment tools
The Program Evaluation Committee
(PEC)
ACGME Requirement Program Evaluation Committee

- Program Director **must** appoint PEC
  - At least 2 faculty members
  - At least 1 resident

- **Must** have a written description of responsibilities

**EVALUATION**
- Outstanding
- Above Expectations
- Meet Expectations
- Below Expectations
- Unsatisfactory
PEC Requirements

- Plan, develop, implement, and evaluate educational activities
- Review and make recommendations for revision of competency-based curriculum goals and objectives
- Address areas of non-compliance with ACGME standards
- Review program annually using evaluations of faculty, residents, others
- **Must** document formal, systematic evaluation of the curriculum at least annually
- **Must** render a written Annual Program Evaluation (APE) report with Action Plan for Program Performance Improvement
  - Delineate how action items are measured and monitored
- **Must** track progress of Action Plan throughout the year
CCC vs. PEC

- Clinical Competency Committee
  - Semi-annual evaluation of residents including Milestone Review
  - Identify struggling residents and make recommendations for remediation/probation, promotion

- Program Evaluation Committee
  - Evaluate program as per ACGME guidelines for annual review, prepare report/action plan, monitor
  - Develop and monitor program evaluation system
Toolbox of Assessment Methods

TOOLBOX OF ASSESSMENT METHODS

A Product of the Joint Initiative

ACGME Outcomes Project
Accreditation Council for Graduate Medical Education
American Board of Medical Specialties (ABMS)

Version 1.1
September 2000
360° Evaluation

- Completed by multiple raters
- Questionnaire regarding resident performance in multiple areas
- Use rating scales (e.g. 1 to 5 where 1 means “never” and 5 means “all the time”)
- Used to assess IPCS; PROF; PC; SBP
- No reports of psychometric qualities
- Challenges: Developing instrument to be used by multiple raters
Chart Simulated Recall Oral Exam

- CSR standardized oral exam
  - Faculty question resident about care
    - Work up, diagnoses, interpretation of clinical findings, treatment plans
    - Mock Orals typically used, but much less standardization
  - Each case takes 5-10 minutes
- Used to assess clinical decision making (PC) and application/use of medical knowledge (MK)
- Psychometric qualities: Exam score reliabilities have been reported between 0.65 and 0.88 when standardized
**Global Rating**

- Rater judges general categories of ability (core competencies) instead of specific skills, tasks, or behaviors
  - Ratings completed retrospectively (end of rotation)
  - Qualitative indicators and numeric values
- Used for end of rotation and summary assessments, include comments (PC, MK, IPCS, PBL, SBP, PROF)
- Psychometric qualities: scores are highly subjective, prone to biases
- Feasibility: easy to construct and use, training of raters important
Objective Structure Clinical Examination

- One or more assessment tools used at 12 to 20 separate standardized patient encounter stations

- Used by medical schools, provides standardized assessment of physician exam and history taking skills (PC); communication skills (IPCS); medical knowledge (MK); ability to summarize and document findings (PC, MK, IPCS); ability to make a differential diagnosis (PC, MK); clinical judgment (PC, MK).

- Psychometric qualities: modest correlations between SP exam scores and clinical ratings or written exams

- Feasibility: Development time can be considerable; facilities and other resources required
Procedure, Operative, or Case Logs

- Record of procedure, operative, or case logs document each patient encounter

- Used to determine the scope of patient care experience; summary report at graduation; not assessment of competence

- Psychometric qualities: no studies determining accuracy of resident recording; minimum numbers not indication of competence

- Feasibility/Practicality: Low cost (usually use accreditation system); manual recording required time consuming
Patient Surveys

• Survey of patients to assess satisfaction with point of care institution and physician’s care
  • Satisfaction assessed using rating categories (e.g., poor, fair, good, very good, excellent). Averages tallied

• Used to assess satisfaction with PC, IPCS, PROF, SBP competencies. Can be used for both formative and summative evaluation

• Psychometric qualities. Estimates of 0.90 for patient satisfaction survey forms used in hospitals and clinic. Much lower for ratings of residents in training. 20-40 responses needed for reliability of .70

• Feasibility/Practicality: Available from commercial developers; development issues include patient literacy problems, small sample size, resource burden, distinguishing resident care vs. other health care team members
Portfolios

- Collection of products prepared by the resident that provides evidence of learning and achievement related to a learning plan.
- Used for formative and summative evaluation; useful for evaluating mastery of competencies that are difficult to evaluate in other ways (PBL, PROF) and patient advocacy.
- Psychometric qualities: reproducible assessments feasible when there is agreement on criteria and standards.
- Feasibility/practicality: ability to capture activities that would otherwise go unnoticed vs. time burden to collect/maintain.
Record Review

• Sample of patient records pulled using predefined criteria to abstract information; summarized and compared to accepted patient standards

• Used to provide evidence regarding clinical decision making (PC, MK), follow through in patient management and preventative health services (PC); appropriate use of clinical facilities and resources (SBP)

• Psychometric qualities: Sample of 8-10 patient records sufficient for reliable assessment

• Feasibility/Practicality: 20-30 minutes per record; time to accumulate adequate sample; criteria development/training
Simulations and Models\textsuperscript{4}

- Simulations aim to closely resemble reality and imitate clinical problems; permit errors without harm

- Used to train and assess surgeons (MK, PC), assess teamwork and leadership (IPCS; SBP); clinical reasoning, diagnostic plans/treatments (MK, PC)

- Psychometric qualities: demonstrated content validity in high quality simulations

- Feasibility/Practicality: requires high level expertise; standardization
Standardized Oral Exams

• Realistic patient cases with trained physician examiner questioning the trainee. Clinical problem is presented in form of patient case scenario. Questions probe trainee reasoning.

• Used to assess clinical decision making (MK, PC) and application or use of medical knowledge (MK)

• Psychometric qualities: Exam score reliabilities reported between 0.65 to 0.88

• Feasibility/Practicality: Mock orals that use cases with less standardization are often used in residency programs; less reliability than standardized exams.
Written Examination (MCQ) ⁴

- Written or computer-based exam composed of multiple choice questions (MCQ)
- Used to assess medical knowledge (MK) and understanding. Comparing ITE scores with national statistics can help identify strengths and weaknesses of resident medical knowledge
- Psychometric qualities: should be designed to rigorous psychometric standards
- Feasibility/Practicality: ITE and Board Exams developed with assistance from psychometric experts; purchased from vendor, reports provided to PD and residents
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Questions?

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References


