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Program Director's Training Course.

PDTC-8: Competency Achievement Assessment

Resident Evaluations

- Need to teach faculty on the proper use of evaluation tools
- Need to educate residents on the value of these evaluations
- Necessary for the following reasons:
  - Were educational objectives achieved?
  - Knowledge, skills or attitude deficiencies?
  - Use aggregate data
  - For resident formative feedback
  - Outcomes project

Medical Knowledge: Assessment Tools

- In service training exam
  - May establish minimum performance expectations
  - Remediation plans
  - Curriculum modifications
  - Relationship with board passing
- Oral examinations
  - More time consuming
  - More biased by the examiner
  - Less reliable

Medical Knowledge: Assessment Tools

- Self-assessment modules
  - Best as on line modules
  - Before and after format
- Simulation
  - Mannequins
    - Expensive
    - Best for intervention skill development
  - Clinical case simulations
  - Role playing
    - Standardized patients

Patient Care: Assessment Tools

- Faculty evaluations
  - Timely
  - In person
  - Formative
  - Summative
- Direct observations
  - ABIM: miniCEX
- 360 degree evaluations
  - Across the entire care spectrum
  - Highly valuable from the “neutral” evaluators
- Procedure logs

Interpersonal and Communication Skills: Evaluation Tools

- Direct observations
- Patient ratings
- 360 degree evaluations
- Develop a standardized tool
- Should assess both interpersonal and communication skills
  - Physician-patient relationship, patient-centered care
- Assess compassion, empathy, and ability to develop and sustain relationships with patient and other health care providers

Practice Based Learning and Improvement: Evaluation Tools

- Four areas:
  - Self assessment and reflection
    - At semiannual evaluation emphasize importance of self education
    - Have them write a couple of learning goals and follow-up on them
    - Have a mentor
  - Evidence-based skills
    - Journal clubs
    - Research projects

Research Curriculum

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Founded in 1934

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Clinical Research During Internal Medicine Residency: A Practical Guide

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Clinical research opportunities attract physicians-in-training to internal medicine, and research remains a core mission of many residency programs. Curiosity, critical thinking, and humanitarianism define the medical profession and are the driving forces behind research. Although programs seek these attributes in applicants, nurturing research interest is often displaced by the primacy of patient care during residency.[1] In 1998, recognizing a decrease in clinical research grant submissions, the National Institutes of Health (NIH) recommended several policy changes to encourage research by young physician investigators.[2] The Accreditation Council for Graduate Medical Education (ACGME) stipulates that internal medicine residents must "participate actively in a scholarly activity," such as original research, writing of a review article, presentation at a scientific society meeting, or other activities that promote a spirit of inquiry and scholarship.[3] In a survey of internal medicine program directors, Levine and colleagues found that in both university and non-university programs, approximately 20% of physicians-in-training fulfill the scholarly activity requirement by conducting hypothesis-driven research.[4]

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Given the importance of resident scholarly activity, including research, this article describes a practical approach for program directors, faculty mentors, and residents to optimize the clinical research experience. The focus is on clinical research because the time required to conduct a basic science project is often prohibitive. This framework is most applicable to traditional internal medicine programs rather than specialized research tracks such as the American Board of Internal Medicine Clinical Investigator Pathway. Three phases of the resident research continuum are described: a *preparatory phase*, an *investigatory phase*, and a *synthesis phase*, as defined by tasks before, during, and after a traditional research elective block (Table 1).

WHY PERFORM RESEARCH DURING RESIDENCY?

Previous work demonstrates that a structured research curriculum can substantially enhance scholarly success for physicians-in-training and their mentors.[5-7] Hayward and Taweel surveyed alumni of an internal medicine residency program with a research requirement.[8] Most alumni felt their research projects were a valuable learning experience; in fact, no other residency program component was rated higher than that of the research project.[8] A similar survey of family medicine residents revealed a greater appreciation for evidence-based medicine among those who had themselves received research training.[9] Recently, a survey of residents who presented at the 2002 American College of Physicians (ACP) Annual Session revealed that a ma-

Table 2 Resident Checklist for Clinical Research

Preparatory Tasks	Choose a topic
	Draw from your own questions enccuntered during patient care.
	Discuss your ideas with as many people as possible.
	Formulate a specific question
	Define the population, intervention, and outcome.
	Find a mentor (or two)
	Discuss research, personal, and professional interests with your mentor(s).
	If you don't "click" with someone, look for another mentor.
	Identify existing institutional resources
	Consult with experts in your area of interest.
	Look for existing databases to help answer the question.
	Detail the study design
	Think through each and every step of data collection.
	Anticipate what problems may arise.
	Create a database.
	Complete the institutional review board (IRB) paperwork
	Call the IRB directly for questions related to category of review.
	Make sure your study is HIPAA compliant.
	Determine whether informed consent is necessary (ask the IRB).
	Consult with a statistician
	Clarify what a clinically significant finding would be.
	Perform a power calculation.
	Determine the statistical tools you will need after data collection.
Investigatory Tasks	Set goals for the research project
	Make goals related to the project and to personal career plans.
	Collect the data
	Securely store the data.
	Keep a log of problems encountered and solutions.
	Perform a periodic quality check of data collection.
Synthesis Tasks	Statistical analysis
	Develop additional specific questions for a statistician to answer.
	Submit an abstract to a regional or national societal meeting
	ACP deadline for abstracts is early October.
	Consider SGIM or subspecialty organization meetings.
	Get feedback from others about your work.
	Write a manuscript
	Discuss criteria for authorship with your mentor.
	Determine an appropriate journal for submission.
	Reflect on your research experience
	Review whether your goals were achieved.
	Review what you've learned about yourself and your interests.
	Consider the role of research in your future career.

Practice Based Learning and Improvement: Evaluation Tools

- Quality improvement
  - Residents to participate in hospital or clinic quality assurance projects and committees
  - Establish a resident specific quality improvement policy
- Teaching skills
  - Program to educate residents on how to educate patients, families and other students

Systems Based Practice: Evaluation Tools

- Three components:
  - Knowledge of the healthcare system
  - Patient advocacy and safety
  - Knowledge of practice management issues
  - Evaluation Methods:
    - Specifically get input from the social workers
    - Chart simulation recall
      - Evaluate the cost of the care provided including medications and tests
    - Portfolios
      - Component of the Outcomes Project
      - To record, organize and reflect on their learning process

Professionalism: Evaluation Tools

- Not many, reliable tools
- Will need to use multiple tools
  - 360 degree's
  - Direct observation with feedback
  - Mini-CEX
  - Peer and student evaluations
  - Incident reports
  - Portfolios
  - Use of clinical scenarios

Figure 7.3: Sample annual resident self evaluation record

Name:_____

Post-graduate year:_____

Date: _____

Cognitive assessment

I have accomplished all of my cognitive objectives for my post-graduate year:

_____ Yes _____ No

If no, which objectives were not accomplished? _____

_____

_____

Reason, if any: _____

_____

Technical assessment

I have accomplished all of my technical goals for my post-graduate year and feel that I can perform them independently: _____ Yes _____ No

If no, which procedures were not mastered? _____

_____

_____

Reason, if any: _____

_____

Figure 7.4: Sample program director's resident evaluation record

Resident's name: _____

Post-graduate year: _____ Date: _____

Grading Scale: 0—Unacceptable

1=Acceptable but with qualification

2=Acceptable

3—Excellent

4—Superior

Criteria for promotion/graduation: =>2 cumulative average

Cognitive Skills:	**0**	**1**	**2**	**3**	**4**
In-training exam	____	____	____	____	____
Oral exam	____	____	____	____	____
Rotational evaluation	____	____	____	____	____

Technical Skills:

Rotational Evaluation

Director's

Assessment: ____ ____ ____ ____ ____

Goals and objectives performance

Accomplished cognitive goals and objectives for post-graduate year?

Figure 7.5: Mini-clinical evaluation exercise (CEX)

Evaluator: _____ Date: _____

Resident: _____ R-1 R-2 R-3 R-4

Patient problem/Dx: _____

Setting: ❑Ambulatory ❑In-patient ❑Other:

Patient: Age: _____ Sex: _____ ❑New ❑Follow-up

Complexity: ❑Low ❑Moderate ❑High

Focus: ❑Data gathering ❑Diagnosis ❑Therapy ❑Counseling

1. Medical interviewing skills (❑Not observed)

1 2 3 4 5 6 7 8 9

Unsatisfactory Satisfactory Superior

2. Physical examination skills (❑Not observed)

1 2 3 4 5 6 7 8 9

Unsatisfactory Satisfactory Superior

3. Humanistic qualities/Professionalism (❑Not observed)

1 2 3 4 5 6 7 8 9

Unsatisfactory Satisfactory Superior

4. Clinical judgment (❑Not observed)

1 2 3 4 5 6 7 8 9

Unsatisfactory Satisfactory Superior

5. Counseling skills (❑Not observed)

1 2 3 4 5 6 7 8 9

Unsatisfactory Satisfactory Superior

6. Organization/Efficiency (❑Not observed)

1 2 3 4 5 6 7 8 9

Unsatisfactory Satisfactory Superior

7. Overall clinical competence (❑Not observed)

1 2 3 4 5 6 7 8 9

Unsatisfactory Satisfactory Superior

8. Comprehensive, timely, and legible completion of the medical record (❑Not observed)

1 2 3 4 5 6 7 8 9

Unsatisfactory Satisfactory Superior

Mini-CEX time: Observing _____ Mins

Comments: _____

_____

_____

_____

Summary

- Objective competency has practically become a mandatory requirement
- Medical knowledge is relatively easy to evaluate
- Patient care requires review of resident documentation
- IPCS and Professionalism need multiple tools
- SBP and PBLI need tools more customized to the particular training program resources

End of Presentation