



AMERICAN ACADEMY OF  
FAMILY PHYSICIANS

AAFP Reprint No. 290B

Recommended Curriculum Guidelines for Family Medicine Residents

# Residents as Teachers and Precepting in Postgraduate Practice

*This document was endorsed by the American Academy of Family Physicians (AAFP).*

## Introduction

This Curriculum Guideline defines a recommended training strategy for family medicine residents. Topic competencies, attitudes, knowledge, and skills that are critical to family medicine should be attained through longitudinal experience that promotes educational competencies defined by the Accreditation Council for Graduate Medical Education (ACGME), [www.acgme.org](http://www.acgme.org). The curriculum must include structured experience in several specified areas. Most of the resident's knowledge will be gained by caring for ambulatory patients who visit the family medicine center. Structured didactic lectures, conferences, journal clubs, and workshops must be included in the curriculum, with an emphasis on outcomes-oriented, evidence-based studies that delineate common and chronic diseases affecting patients of all ages. Targeted techniques of health promotion and disease prevention are hallmarks of family medicine. Appropriate referral patterns and provision of cost-effective care should also be part of the curriculum.

Program requirements specific to family medicine residencies may be found on the ACGME website. Current AAFP Curriculum Guidelines may be found online at [www.aafp.org/cg](http://www.aafp.org/cg). These guidelines are periodically updated and endorsed by the AAFP and, in many instances, other specialty societies, as indicated on each guideline.

Each residency program is responsible for its own curriculum. ***This guideline provides a useful strategy to help residency programs form their curricula for educating family physicians.***

## **Preamble**

Studies estimate that residents spend up to 20% of their time on teaching, regardless of future career plans. This also reflects that students and residents are recipients of a significant amount of teaching from residents, making it crucial to ensure that residents have opportunities to enhance their teaching skills. The ACGME Residency Review Committee for Family Medicine recommends that senior residents and fellows serve in supervisory roles (both ensuring patient safety, and teaching junior residents and students) during their training, which recognizes their progress toward independence. Acting in an educational role reinforces the resident-teacher's own learning as residents who teach about a subject increase their own knowledge of that topic.

Teaching skills developed during residency translate into teaching skills that are used in independent practice. Residents who graduate with excellent teaching skills often provide better care to patients through better patient education and more effectively engage their patients in shared medical decision making. Residents with strong teaching skills can also be more effective team leaders, with the ability to give and receive feedback, and to assess and address team members' learning needs. Physician-teachers can employ their public speaking skills to improve the health of their community by improving medical knowledge, increasing public health awareness, or undertaking legislative advocacy. Developing and assessing residents' teaching skills also provides opportunities to identify and engage with skills and interest in academic careers that will help train future generations of family physicians.

This Curriculum Guideline provides recommendations for the competencies, attitudes, knowledge, and skills that family medicine training programs should include in their curricula. Incorporating these recommendations will improve the education of residents and students, and potentially translate to better education of patients and future generations of physicians.

## **Competencies**

At the completion of residency training, a family medicine resident should be able to:

- Recognize the value of—and incorporate opportunities for—teaching a variety of learners (e.g., students, residents, colleagues, patients) regarding the clinical practice of medicine (Professionalism)
- Demonstrate effective teaching skills and strategies to actively engage learners in a variety of clinical settings (e.g., hospital, clinic, bedside, nursing home) and academic/didactic settings in a manner appropriate to the size and needs of the audience (Practice-based Learning and Improvement, Interpersonal and Communication Skills)
- Assess learners in a developmentally appropriate manner using a standardized framework to provide both summative and formative evaluation (Practice-based Learning and Improvement)

- Effectively provide direct positive and constructive feedback to learners in a timely manner and be able to navigate individual barriers to the feedback process (Practice-based Learning and improvement, Interpersonal and Communication Skills)
- Strategize incorporating learners into clinical and non-clinical learning environments while emphasizing maintenance of excellent patient care and clinical efficiency (Practice-based Learning and Improvement, Systems-based Practice)

## **Attitudes**

The resident should develop attitudes that encompass:

- Identification of one's own attitudes and behaviors, and recognition of the importance of those attitudes as they relate to teaching others
- Willingness to actively engage in giving feedback to and receiving feedback from learners (formative/summative, written/verbal)
- Recognition that physician teachers educate not just about content, but also about values and professionalism
- Recognition that physicians are teachers (e.g., resident teachers teach colleagues, other professionals, junior residents, medical students, and patients)
- Recognition that teaching is valuable in the following ways:
  - Teaching is an important skill for physicians, and experience improves this skill, as well as solidifying knowledge of the content being taught.
  - Teaching students increases student choice of family medicine and develops future colleagues.
  - Incorporating teaching into a physician's career increases job satisfaction and reduces burn out.
  - Having a better understanding of teaching and learning makes people better learners themselves.
  - Patients admire physicians who are teachers.
  - Learning how to teach makes physicians better patient educators.

## **Knowledge**

In the appropriate setting, the resident should demonstrate the ability to apply knowledge of:

1. Educational principles
  - a. Adult learning theory

- i. Goal-oriented
    - ii. Autonomous and self-directing
    - iii. Builds upon pre-existing resources and experiences of the learner
  - b. Roles of teachers/learners
- 2. Assessment
  - a. Understanding assessment objectives
    - i. To target teaching (e.g., ensuring competency, meeting minimum standards)
    - ii. To motivate
    - iii. To provide feedback
  - b. Assessment methods (e.g., observation, questioning, patient cases, self-assessment)
  - c. Objective versus subjective
  - d. Validity and reliability of assessments
- 3. Evaluation/feedback
  - a. Summative versus formative
  - b. Characteristics of effective feedback
  - c. Standard feedback formats
    - i. Feedback sandwich
    - ii. Ask-Tell-Ask
  - d. Common evaluation errors/pitfalls and strategies to overcome them
- 4. Learners at the extremes of the spectrum: challenging to gifted
  - a. Identifying common challenges
  - b. Techniques for addressing common challenges
  - c. Methods of stimulating and challenging gifted learners
- 5. Integrating learners into a clinical practice
  - a. Supervision
    - i. ACGME and American Osteopathic Association (AOA) requirements for residents
    - ii. Liaison Committee on Medical Education (LCME) requirements for students
  - b. Preparing a practice
    - i. Welcoming learners
    - ii. Setting expectations
    - iii. What students and residents can learn in a practice
    - iv. Methods for maintaining clinical safety and efficiency while teaching
  - c. Billing and coding
    - i. Documentation requirements for preceptors of students and residents

- ii. Billing rules when working with students and residents

## **Skills**

In the appropriate setting, the resident should demonstrate the ability to independently perform or appropriately refer the following:

1. Teaching skills
  - a. Learning styles and how to utilize each for maximal learning
    - i. Visual (spatial)
    - ii. Aural (auditory-musical)
    - iii. Verbal (linguistic)
    - iv. Physical (kinesthetic)
    - v. Logical (mathematical)
  - b. Learning environment preferences and how to maximize education within that framework
    - i. Social (interpersonal)
    - ii. Solitary (intrapersonal)
  - c. Safe and active learning environment
    - i. Ensure information is relevant, practical, and contextual
    - ii. Create an environment that is positive and respectful
    - iii. Encourage learners to self-reflect, diagnose their own learning needs, and create their own learning objectives
    - iv. Assist learners in carrying out their own learning plans
    - v. Involve learners in evaluating their own learning
    - vi. Stimulate learning through social interactions
    - vii. Model self-directed learning
    - viii. Effectively use questioning during teaching to probe for information and decision-making skills
    - ix. Reinforce prior learning and facilitate application of general principles to various clinical problems
    - x. Demonstrate enthusiasm
  - d. Teaching strategies in various settings
    - i. Group learning
      - 1) Small group discussions
      - 2) Large group lectures
      - 3) Case-based discussions
      - 4) Facilitation of problem-based learning
      - 5) Flip the classroom technique
    - ii. Clinical teaching
      - 1) Inpatient
      - 2) Outpatient
      - 3) Procedures
      - 4) Bedside

- e. Structured teaching styles
    - i. One-minute preceptor/five-step microskills model
    - ii. Prepare, Orchestrate, Educate, Review (POwER) precepting
    - iii. Summarize, Narrow, Analyze, Probe, Plan, Select (SNAPPS) model
    - iv. “What if” model
  - f. Mentoring/being a role model
    - i. Demonstrate self-directed learning
    - ii. Demonstrate effective teaching skills
    - iii. Demonstrate patient care skills/communication
2. Assessment
    - a. Identifying one’s own knowledge and experience
    - b. Assessment of learner’s knowledge, ability, and interest, and adjustment of teaching to this assessment
    - c. Setting learner-appropriate expectations/agenda
  3. Evaluation/feedback
    - a. Demonstrate various methods of evaluation (e.g., direct observation, questioning)
    - b. Give useful verbal and written/electronic feedback
    - c. Receive feedback and use it to enhance teaching performance

## **Implementation**

This curriculum should be taught during both focused and longitudinal experiences throughout the residency program. This may include a selected combination of workshops, observed teaching opportunities, videotaping with later review and self-reflection, readings, and even more focused courses or retreats, as appropriate to fit the needs of each program. Often, concentration just prior to or during the more senior years of residency is helpful. Residency programs should offer opportunities to practice teaching in different environments, such as clinical settings (e.g., hospital, clinic, nursing home) and group learning sessions (e.g., lectures, small group discussions), as well as to practice teaching for different purposes (e.g., improving clinical decision making with medical knowledge, professionalism, patient care topics such as end-of-life decisions and ethics). Implementation should model the desired teaching behaviors and attitudes; for example, it should be active in nature, include a variety of modalities, and have some repetition to avoid skill regression and promote lasting skills. Faculty who can model ideal teaching skills should have primary roles in the resident as teacher curriculum.

It is recommended that assessment and evaluation of the teaching resident be included; self-evaluation, evaluation by learners, and evaluation by faculty “expert” teachers is

encouraged. Some programs may wish to implement observed structured teaching examinations to give a standardized opportunity to observe teaching skills.

## Resources

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## **Website Resources**

Alliance for Academic Internal Medicine. Residents as Teachers Curriculum Modules. [www.im.org/p/cm/ld/fid=401](http://www.im.org/p/cm/ld/fid=401)

Society of Teachers of Family Medicine (STFM) Teaching Physician. (STFM login required) [www.teachingphysician.org/residents-as-teachers](http://www.teachingphysician.org/residents-as-teachers)

University of North Carolina (UNC) Department of Pediatrics. Resident Teaching Curriculum. [http://pediatrics.med.unc.edu/education/teaching\\_center/resident-teaching-curriculum](http://pediatrics.med.unc.edu/education/teaching_center/resident-teaching-curriculum)

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