

Family Medicine Clerkship Curriculum: Competencies and Resources

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Funded by the Health Resources and Services Administration (HRSA) from 2000–2005, the Family Medicine Curriculum Resource Project (FMCPR) developed a set of resources to improve medical student education. As part of this project, the FMCPR Clerkship Workgroup created and organized resources for developing, teaching, and evaluating a family medicine clerkship. Using the Accreditation Council for Graduate Medical Education competencies as the overarching structure, the organizational scheme incorporated family medicine principles and themes in covering core topics. This curricular resource was designed to be flexible and adaptable to different medical schools and curricular settings.

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Funded by the Health Resources and Services Administration (HRSA) from 2000–2005, the Family Medicine Curriculum Resource Project (FMCPR) developed a set of resources to improve medical student education. Two workgroups were formed—one focused on pre-clerkship training and the other focused on clerkship and post-clerkship education. This article focuses on the latter group's work. The FMCPR Clerkship Workgroup developed competencies for all students completing a family medicine core clerkship and provided resources for family medicine clerkship curriculum development. In addition, the workgroup defined desirable prerequisites for a fourth-year medical student entering family medicine residency.

The competencies, curricular resources, and post-clerkship recommendations are intended to help medical school educators who develop, implement, and evaluate family medicine clerkships. The clerkship workgroup used an iterative process that relied on expert opinion within and outside the group. The workgroup reviewed historical documents related to the development of the

family medicine clerkship,^{1,2} recent recommendations for curricular revision,³ and the Accreditation Council for Graduate Medical Education (ACGME) residency competency statements.^{4,5}

From this review and from dialogue with participants at national presentations, the workgroup confirmed that curricular objectives and resources must be adaptable, current, peer reviewed, and connected to the ACGME competency areas. The end product of this project was intended to be a resource, not a prescription. Family medicine clerkships must be responsive to local context and, therefore, the resources were envisioned not as a restrictive set of instructions but rather as a "living" entity constantly refreshed through new peer-reviewed contributions, selective editing, and responsiveness to changes in medical education and society.

Competencies, Principles, Themes

The workgroup created a set of learning objectives, organized along the dimensions of ACGME competencies and family medicine clerkship themes and informed by family medicine principles. The ACGME competencies provided the overarching framework for the learning objectives. Indexing clerkship resources by the ACGME competencies should enable predoctoral educators to connect the family medicine clerkship to residency training and postgraduate practice. Consistent with the Future of Family Medicine's (FFM)

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recommendations, education should be a continuum from medical school to practice.⁶ A shared framework should facilitate linking the undergraduate curriculum with residency competencies.

Family medicine principles are qualities that define the essence of the profession. The workgroup derived these principles by reviewing historical documents^{7,8} and current curricula. After the workgroup created a set of principles, the FFM published its final report. The original principles were integrated with concepts emphasized by the FFM report: the biopsychosocial approach to care (patient centered), continuity of care (continuous healing relationships), comprehensive care (whole-person care), coordination/complexity of care (integration), and context of care (evidence based).

The family medicine clerkship themes provide the context in which family physicians deliver care. Helping to focus clerkship goals and objectives, the themes include prevention and wellness, acute and chronic illness, and community and population medicine.

The first product was an outline of broad competencies for family medicine clerkships (Table 1). This resource will be useful to medical educators as they review their clerkships to meet current challenges to revise the medical curriculum relative to the ACGME competencies.

Core Topics

The workgroup developed a set of competencies based on a list of family medicine core topic areas (Table 2). The list of core topics was derived by reviewing leading texts used in family medicine clerkships,⁸⁻¹⁴ a survey of common problems encountered by family

physicians,¹⁵ and current clerkship topic priorities reported informally by clerkship directors. Once a list of core topics was developed, the workgroup developed competency goals and objectives indexed by ACGME competencies as well as educational resources for each of the 29 topic areas.

The workgroup sought input at national presentations during the entire process and finalized the core topic list through consensus. Similar content was combined into one topic where possible (eg, the topic "chest pain" includes coronary artery disease). The workgroup chose to cover care of women before and during pregnancy, including labor and delivery, though anecdotal reports indicated that many family medicine clerkships cannot provide training in this area. Some topics reflected the workgroup's perception of current trends and curricular needs, such as care delivered in a rural setting, but not all topics covered will be relevant to all medical schools.

Other Resources

Special Topics

In addition to the list of core topics, the workgroup participated in developing the competencies for a set of topics stipulated by HRSA in the original contract (Table 3). The topic list will grow and change as the focus of the practice of family medicine and the needs of educators evolves.

General Resources

The workgroup also recognized the need for a compendium of general educational resources. Over the course of the contract, they assembled these resources,

Table 1

Curriculum Themes Organized by ACGME Competency Areas (Example: Systems-based Practice)

Systems-based Practice

- *Acute and Chronic Illness*
 - Advocate for quality patient care and assist patients in dealing with system complexities.
 - Recognize the barriers to coordination of health care and recommend improvements.
 - Describe the role of the family physician as coordinator of care.
 - Recognize appropriate consultation resources, both medical and nonmedical, in discussing effective use of resources.
 - Recognize and explain the various settings in which family physicians provide care and the integration of care that occurs across these settings.
- *Prevention and Wellness Theme*
 - Understand how the prevalence of disease in a population changes the predictive value of a screening test (eg, PSA screening and ethnicity).
 - Demonstrate knowledge of epidemiological studies, including data collection, biostatistical techniques, study design, and implementation of results.
 - Describe strategies for patient education and disease prevention that can be implemented with those who do not present for care on their own.
- *Community and Population Medicine*
 - Analyze the health of a community, using census, vital statistics, public health data, and other appropriate sources of data.
 - Describe methods of controlling health care costs and allocating resources that do not compromise quality of care.

Table 2

Core Topics

- Arthritis/arthralgia
- Asthma/COPD
- Back pain
- Cancer screening
- Chest pain (including ASCVD)
- Cultural competence
- Dementia
- Depression/anxiety
- Diabetes
- Domestic violence
- Dyspepsia
- Fatigue
- Frailty
- Headache
- Hypertension
- Immunizations
- Menopause
- Menstrual disorders
- Nutrition/obesity
- Osteoporosis
- Pain
- Perinatal care
- Rural care
- Skin problems
- Smoking/tobacco abuse
- Strains/sprains
- Stroke/cerebrovascular disease
- URI/acute respiratory infections
- Vaginal/urinary symptoms

COPD—chronic obstructive pulmonary disease

ASCVD—arteriosclerotic cardiovascular disease

URI—upper respiratory infection

which include seminal references in family medicine education, a list of recommended textbooks, references to curricular reform efforts by other disciplines, and resources on general topics (eg, communication).

Glossary

The project's educational consultant created a glossary of common terms to help the project team and provide an enduring resource.¹⁶ This glossary serves as a valuable reference for medical educators, especially those coming into teaching from clinical settings. The glossary includes definitions of common educational terms, a list of instructional and assessment strategies, and recommendations for action verbs when crafting instructional objectives.

Faculty Development

An important component of any family medicine clerkship is the setting in which learning occurs. Perhaps more than any other discipline, students learn the principles of family medicine almost exclusively in

Table 3

Special Topics

- End-of-life and palliative care
- Geriatrics
- Genetics
- Healthy People 2010 objectives
- Informatics
- Mental health
- Substance abuse
- Oral health

community “laboratories”—practices of family physicians.¹⁷ In 2004, the Future of Family Medicine report defined the ideal setting for teaching family medicine clerkship students as a “personal medical home” where patients are involved in a continuous, healing relationship with their family physician.

The need for this kind of setting has not changed, but the current context for the settings has changed. There is a pressing need to preserve these clinical laboratories as sites for clinical instruction and learning for our medical students; otherwise, we cannot properly deliver the content and process of family medicine. What so clearly characterizes the family medicine clerkship is the interaction between the community preceptor and the student that occurs in these sites. All of the characteristics that were defined in 1991 still hold true today for defining the optimal setting and faculty involved in a family medicine clerkship.

Future of Family Medicine Report

The workgroup began its task concurrently with the release of the FFM report, which has redefined the specialty of family medicine. The FFM described characteristics of the New Model (Table 4). This report also defined characteristics of faculty needed to train students in this new environment (Table 5).

Summary

A workgroup of experienced educators from family medicine predoctoral and residency programs around

Table 4

Characteristics of the New Model of Family Medicine

- Patient-centered team approach
- Elimination of barriers to access
- Advanced information systems, including an electronic health record
- Redesigned, more-functional offices
- A focus on quality and outcomes
- Enhanced practice finance

Table 5

Characteristics of Faculty Needed to Train Medical Students in the New Model of Family Medicine

- The faculty should be trained and current in use of technology at the point of care with patients.
- The setting should provide access to Web-based learning resources with access to the Internet for all students.
- The faculty should be self-aware individuals who can demonstrate and role model lifelong learning principles in their routine everyday care of patients.
- Faculty diversity will reflect the diversity in the patient population served at the setting where student clinical training occurs.

the country developed the FMCRP Clerkship resources. The workgroup assembled a compendium of resources and made them available to medical educators via the Web at www.stfm.org/curricular/family.htm.

These resources include broad goals and competencies for students on the family medicine core clerkship and educational resources that support teaching core topics. Family medicine educators can use these resources to develop new clerkships, revise existing clerkships in response to local and national need, justify the need for curricular time, and create tighter linkages with residency education. The FMCR was designed so that educators from schools with widely different missions, resources, and curricula can use parts of this tool to create new or modify existing curricula.

FMCR Clerkship Workgroup Members

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