AMERICAN ACADEMY OF FAMILY PHYSICIANS

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Recommended Curriculum Guidelines for Family Medicine Residents

Health Systems Management

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

Introduction

This Curriculum Guideline defines a recommended training strategy for family medicine residents. Attitudes, behaviors, 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. The family medicine curriculum must include structured experience in several specified areas. Much of the resident's knowledge will be gained by caring for ambulatory patients who visit the family medicine center, although additional experience gained in various other settings (e.g., an inpatient setting, a patient's home, a long-term care facility, the emergency department, the community) is critical for well-rounded residency training. The residents should be able to develop a skillset and apply their skills appropriately to all patient care settings.

Structured didactic lectures, conferences, journal clubs, and workshops must be included in the curriculum to supplement experiential learning, with an emphasis on outcomes-oriented, evidence-based studies that delineate common diseases affecting patients of all ages. Patient-centered care, and targeted techniques of health promotion and disease prevention are hallmarks of family medicine and should be integrated in all settings. Appropriate referral patterns, transitions of care, and the 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. These guidelines are periodically updated and endorsed by the AAFP and, in many instances, other specialty societies, as indicated on each guideline.

Please note that the term "manage" occurs frequently in AAFP Curriculum Guidelines.

“Manage” is used in a broad sense to indicate that the family physician takes responsibility for ensuring that optimal, complete care is provided to the patient. This does not necessarily mean that all aspects of care need to be directly delivered personally by the family physician. Management may include appropriate referral to other health care providers, including other specialists, for evaluation and treatment.

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

Health systems management (HSM) is a core ACGME requirement for all family medicine residencies. Significant components of this touch upon competencies in patient care, medical knowledge, systems-based practice, practice-based learning, professionalism, and interpersonal and communication skills.

This curriculum is best taught over the course of residents’ education, with ongoing repetition of important topics such as billing and coding, as well as review of the material appropriate to their level of training as they evolve as clinicians.

The curriculum in HSM prepares residents not only to improve and manage their own practices, but also to gain a broader understanding of the health care system as a whole and how it applies to their own careers and practices. It teaches them the complexities of the system related directly to patient care. It also provides a base from which residents can step into leadership roles in the design and implementation of health care systems.

Competencies

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

- Demonstrate an adequate understanding of the health care system to be able to help patients successfully navigate, utilize, and understand it (Patient Care)
- Demonstrate adequate understanding of insurance terminology and government rules and regulations at the federal and state levels, including knowledge of where to locate information on existing health care systems and learn about emerging concepts and ideas (Systems-based Practice)
- Understand the business operations of their clinical practices, revenue streams, human resources, and contracts (i.e., all aspects of running a successful practice) (Practice-based Learning and Improvement)

- Understand the complex dynamics involved in patient care, including the types of medical coverage, community and health care resources, and cultural needs within the context of their medical practices (Systems-based Practice)
- Demonstrate awareness of the interdependence within the health care system of patients, their physicians, insurance companies, and government agencies at all levels (Systems-based Practice)
- Engage in ongoing improvement in the quality of health care provided to their patients by maintaining clinical competence and actively participating in development of measures to optimize outcomes (Practice-based Learning and Improvement)
- Recognize signs of physician burnout, utilize resources to enhance physician well-being, and be involved in systems that promote professional satisfaction (Professionalism)
- Demonstrate the ability to communicate effectively with the patient, the patient's family, and caregivers to ensure that care is streamlined appropriately within the health care system (Interpersonal and Communication Skills)
- Demonstrate the ability to advocate for patient-centered care and the physician-patient relationship (Interpersonal and Communication Skills)

Attitudes and Behaviors

Residents should develop attitudes and behaviors that encompass:

- Awareness and appreciation of the complexity of the health care system as it pertains to patient care across all domains that directly and indirectly affect patients
- Understanding of how major participants in the health care system work, including but not limited to government, commercial insurance networks, the veterans' health care system, indigent health care system models, and Native American health care delivery systems
- Adequate understanding of the principles of billing and coding in the most common domains of primary care (i.e., ambulatory care, hospital medicine, procedural medicine, nursing homes, assisted living, home visits, and maternity care)
- Basic understanding of business office processes, cash flow monitoring, and fraud prevention
- Basic understanding of current public debate regarding health care changes at local, state, federal, and global levels, and how physicians can participate and contribute to such discussions
- Appreciation of the role professional medical societies play in advocacy and policymaking

- Understanding of the functions and limitations of the U.S. Department of Health and Human Services (HHS) and agencies such as the U.S. Food and Drug Administration (FDA), Drug Enforcement Administration (DEA), Centers for Disease Control and Prevention (CDC), National Institutes of Health (NIH), and state-level regulatory and oversight agencies
- Awareness of the role of county and state health departments
- Awareness of oversight rules when working with mid-level providers and physician extenders
- Awareness of the limitations and scope of practice for other ancillary professionals (e.g., dentists, physical therapists, occupational therapists, speech therapists, dietitians, optometrists)
- Understanding of the financial impact of their work at their own practice sites
- Understanding of the value of quality improvement initiatives in their own practice
- Appreciation of and participation in problem resolution in their practice, including communications improvement with their staff
- Understanding of risk management with respect to their personal practice

Knowledge

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

1. Commonly used resources in health care delivery
    a. International Statistical Classification of Diseases and Related Health Problems, 10th revision (ICD-10) and the International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM)
    b. Current Procedural Terminology (CPT)
    c. Healthcare Common Procedure Coding System (HCPCS)
2. Models of health care delivery, including but not limited to:
    a. Solo practice/small-group practice
    b. Employed physician
    c. Government and military employment
    d. Independent contractors
    e. Direct primary care
    f. Concierge care
    g. Hospital medicine

h. Long-term care/assisted living care

3. Principles of team-based care
   a. Patient-centered medical home (PCMH)
   b. Program of All-Inclusive Care for the Elderly (PACE) units

4. Current health care purchasing models and their implications for physician practices, including but not limited to:
   a. Commercial insurance plans
      i. Health maintenance organizations (HMO), preferred provider organization (PPO), vertically integrated models
   b. Accountable care organizations (ACOs)
   c. Medicare Access and CHIP Reauthorization Act (MACRA)
      i. Merit-based Incentive Payment System (MIPS)
      ii. Alternative Payment Model (APM)
   d. Bundled payment programs
   e. Medicaid and other state/federal government-funded plans, including the U.S. Department of Veterans Affairs (VA)

5. Contracting with payers
   a. Medicare, Medicaid, and Tricare
      i. Diagnosis-related groups
      ii. Prospective payment system
   b. Commercial insurance companies
      i. Individual contracts
      ii. Group purchasing
      iii. Capitated versus fee-for-service contracts

6. Measures of physician productivity
   a. Resource-based relative value scale (RBRVS) and relative value units (RVUs)

7. Incentivized compensation plans
   a. Minimum salary plus incentive
   b. Production- or productivity-based compensation plans
   c. Capitation and capitation plus productivity
   d. Productivity- and quality-based combined compensation plans
   e. Partnership

8. Measures of physician quality
   a. Healthcare Effectiveness Data and Information Set (HEDIS)

b. Physician Quality Reporting System (PQRS)
c. PCMH
d. Diabetes Prevention Recognition Program (DPRP)

9. Quality improvement processes
    a. Find, Organize, Clarify, Understand, Select–Plan, Do, Study, Act (FOCUS–PDSA)
    b. Six Sigma
    c. Familiarity with quality improvement tools such as run charts, root cause analysis, fishbone diagrams, and process maps

10. Legislation relevant to health care
    a. Patient Protection and Affordable Care Act (ACA)
    b. Health Insurance Portability and Accountability Act (HIPAA)
    c. MACRA
    d. Children's Health Insurance Program (CHIP)
    e. Genetic Information Nondiscrimination Act
    f. Health Information Technology for Economic and Clinical Health (HITECH) Act
    g. Physician Payments Sunshine Act
    h. Food and Drugs Act
    i. Mental Health Parity and Addiction Equity Act (MHPAEA)

11. Legislation applicable to small and medium-sized businesses
    a. Federal equal employment opportunity laws
    b. Workers' compensation system laws
    c. Americans with Disabilities Act (ADA)
    d. Occupational Safety and Health Administration (OSHA) regulations
    e. Family and Medical Leave Act (FMLA)

12. Basic knowledge of billing and patient accounting systems

13. Federal and state taxation systems and models pertinent to operation of a business/practice

14. Insurance
    a. Medical malpractice
        i. Occurrence-based policy versus claims-made policy
        ii. Federal Tort Claims Act
        iii. Risk mitigation

b. Business coverage
c. Personal insurance: disability (long-term and short-term), life, property

15. Appropriate online behavior and social media presence, cybersecurity, and HIPAA-appropriate patient communication modes

Skills

In the appropriate setting, residents should demonstrate the ability to:

1. Code and charge appropriately for services performed by family physicians in outpatient and inpatient settings, including nursing homes, other domiciliary facilities, and patients' homes
2. Use common modifiers correctly
3. Use continuous quality improvement tools to improve patient care quality
4. Interpret reports of physician productivity and practice performance
5. Interpret quality data in the context of their own practice and design quality improvement projects
6. Organize and lead team-based care delivery models
7. Incorporate population health metrics and management strategies into practice
8. Differentiate various types of health care purchasers and describe the advantages and disadvantages of each
9. Use information from the Knowledge section to aid in job searches and contract negotiations
10. Help patients understand systems and laws that impact health care, such as workers' compensation, OSHA regulations, and FMLA
11. Recognize the essential elements that make a practice a patient-centered medical home
12. Be aware of potential pitfalls when working with outside vendors (e.g., billing companies, housekeeping, waste management, records management [storage and destruction])
13. Understand risk-management contracts and liability insurance concepts, including tail coverage

Implementation

This curriculum is taught primarily through didactics and longitudinal experience over the course of the residency program. The curriculum begins with basic training in the PGY1 year, teaching skills such as charging and coding appropriately. As residents progress through residency and gain comfort with their medical skills, the curriculum moves on to more advanced aspects of practice management, enabling the residents to become part of the process of understanding and solving problems.

Annual billing and coding workshops featuring content geared toward year of training should be conducted for residents. Resident participation in group/clinic practice meetings should be facilitated.

Residents should have ongoing conversations with their clinic managers, faculty, etc. regarding quality improvement, clinic flows, and patient satisfaction.

Other methodologies to enhance resident understanding of the health care system should be included, such as scheduling speakers who have expertise in human resources, financial management, contract management, staff and physician recruitment, and other relevant areas.

Residents can gain insight into the realities of the health care system by meeting with past graduates and working with community preceptors.

Resources

Departmental

- Ongoing survey results from patients
- Periodic survey results from staff regarding resident attitudes and behaviors
- Practice billing reports from accounting (ideally quarterly per resident)
- Regular feedback to residents, including performance comments on billing, coding, and communication
- Regular meetings with faculty advisors/program directors to review collected data with each resident

General

- Accreditation Council for Graduate Medical Education. ACGME Program Requirements for Graduate Medical Education in Family Medicine; July 2017. http://www.acgme.org/portals/0/pfassets/programrequirements/120_family_medicine_2017-07-01.pdf.

Local Web Resources

- AAFP state chapter
- Local health department
- Other state agencies
- State medical society

Suggested Periodicals

- *Family Practice Management*. www.aafp.org/fpm
- *Medical Economics*. http://medicaleconomics.modernmedicine.com

Website Resources

American Medical Association (AMA). www.ama-assn.org/ama

Physicians Practice. www.physicianspractice.com/

U.S. Department of Health and Human Services:

- Centers for Disease Control and Prevention (CDC). www.cdc.gov/
- Centers for Medicare & Medicaid Services. Accountable Care Organizations (ACO). https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/ACO/index.html?redirect=/Aco/
- Medicare.gov. www.medicare.gov/
- National Institutes of Health (NIH). www.nih.gov/

U.S. Department of Justice, Drug Enforcement Administration, Diversion Control Division. Title 21 United States Code (USC) Controlled Substances Act. www.deadiversion.usdoj.gov/21cfr/21usc/index.html

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