Task Force Report 3. Report of the Task Force on Continuous Personal, Professional, and Practice Development in Family Medicine

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ABSTRACT

PURPOSE This Future of Family Medicine task force report proposes a plan for lifelong learning that is designed to ensure family physicians are prepared to deliver the core attributes and system services of family medicine throughout their careers, especially within the New Model of family medicine that has been proposed.

METHODS This report is based on consideration of the proposed New Model for family medicine, along with a careful review of the data generated through research conducted for the Future of Family Medicine project. The personal and professional development of family physicians and the continuous improvement of their practices were considered with an orientation toward providing systems to support the family patient-physician covenant. As a foundation for developing its plan for lifelong learning, the task force explored domains of management mastery, including the management of knowledge and information, the management of relationships, the management of care processes, and cultural proficiency.

MAJOR FINDINGS This report presents a number of proposed innovations that have the potential to assure that family physicians deliver the core attributes of family medicine throughout their careers, including linking the family physician's personal and professional development in a developmental context, based on ongoing self-assessment through the career stages of a family physician, and the creation of continuous personal and professional development modules as a new foundation for continuing medical education and professional development. The process for the continual improvement of clinical practice in family medicine must begin with a close working relationship between the academic community and the practice community. This relationship should be iterative over time, with research creating new practice innovations, which in turn create new questions for the research enterprise.

CONCLUSION While traditional continuing medical education (CME) has served to meet many of the original tasks for which it was designed, the current model does not meet many of the emerging needs of patients, physicians, or health delivery systems. For this reason, traditional CME should be replaced with a process that incorporates personal, professional, and practice development. In order to build a more dynamic and effective way to support lifelong learning and performance change, this new process must address the needs that accompany the personal and professional developmental challenges encountered throughout the course of a family physician's professional lifetime.

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TASK FORCE CHARGE: To assure that family physicians deliver the core attributes of family medicine throughout their careers.

INTRODUCTION

Appropriate design of processes and systems are needed to ensure that all family physicians regardless of professional role, practice locale or career stage will continue to deliver the core attributes of

family medicine. Family medicine continues to represent a viable and vital professional discipline within medicine, and primary care remains the foundation for the improved health of individuals and populations. The patient-physician covenant remains the cornerstone of individual well-being and the source of professional satisfaction for family physicians. With an appropriate reframing of the tasks of personal, professional, and practice development, and development of systems to support a new model, there can be assurance of delivery of family medicine core attributes throughout the career of the family physician.

This report is based upon consideration of the proposed New Model for family medicine, along with a careful review of the data generated through research conducted for this project. Task force discussions were focused on the importance of providing systems to support the family patient-physician covenant. The personal and professional development of family physicians and the continuous improvement of their practices should be conducted for the purpose of improving the care of patients and communities. All aspects of the process defined in this report are described with that principal purpose in mind.

DOMAINS OF MANAGEMENT MASTERY

The core attributes of family medicine can be organized into a discrete number of general domains. These domains include (1) the management of knowledge and information, (2) the management of relationships, (3) the management of care processes, and (4) cultural proficiency. These domains are consistent with the core competencies determined by the Accreditation Council for Graduate Medical Education and American Board of Medical Specialties: medical knowledge, practice-based learning, professionalism, system-based practice, patient care, and interpersonal and communication skills.[1]

Building on these 6 areas, Epstein and Hundert[2] advanced the following definition of professional competence: "The habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served."

Based on their review of the literature on measures of competence, Epstein and Hundert concluded that subjective, multiple-choice, and standardized patient assessments, although reliable, underemphasize the following important domains of professional competence: integration of skills and knowledge, context of care, information management, teamwork, health systems, and patient-physician relationships. Rather than focusing on "isolated competencies," they recommended that new multidimensional assessment mechanisms be developed that assess clinical reasoning, expert judgment, management of ambiguity, professionalism, time management, learning strategies, and teamwork.

Management of Knowledge and Information

Family medicine's knowledge base is growing at an exponential rate. The scope and nature of family medicine requires that family physicians be masters of knowledge and information management. They must possess the skills to access quickly and efficiently information relevant to the care of individual patients, while maintaining an up-to-date knowledge of their professional fields. In addition to being able to access information quickly and efficiently, mastery of complex knowledge and information requires an ability to translate that knowledge effectively in the context of individual patient's needs and to communicate that information efficiently to patients and colleagues. Such information mastery will require new systems that consolidate critical new and emerging information and lead physicians to this information as they develop solutions to challenges in patient care.

Management of Relationships

The family physician's daily work is conducted through a series of relationships beginning with the patient and including other members of the health care team, consultants, administrators, and members of the patient's family and community. Just as family physicians should improve their knowledge continuously, so should they continuously improve their ability to develop constructive personal and professional relationships with these key constituents. Any plan for the ongoing professional development of family physicians should include a focus on enhancing these relationships.

Family physicians must also maintain a mastery of the relationships among multiple disease processes in individual patients; between individual patients and the families, communities, and environments in which patients live; among interrelated medical, psychosocial, and health system factors that affect patient well-being; and between the sometimes competing needs of individual patients and larger population or public health concerns.

Management of the Care Process

It is not possible for a family physician to care competently for patients purely by developing excellence in the physician's personal attributes and skills. Excellent family physicians practicing in systems that are inadequate to the needs of personal, professional, and practice development cannot achieve outcomes that fully meet the needs of individual patients or broader community health and wellness needs. Mastery of

knowledge and of relationships are necessary but insufficient to ensure the quality of care delivered to patients. To these skills must be added the ability to engineer, design, and continuously improve processes of care in all settings in which a family physician may practice. This ability would necessarily include system design and evaluation skills as well as leadership and management expertise. An important outcome of this process would be the ability of family physicians to deliver high-quality care as defined by the Institute of Medicine's Chasm Report: safe, timely, effective, efficient, patient centered, and equitable.[3]

Cultural Proficiency

The fourth and final domain of management mastery that is a required competency of family physicians is cultural proficiency. As the US population becomes more culturally diverse, additional skills will be required for family physicians to deliver care in a culturally proficient manner. For this report, the term *cultural proficiency* is used, rather than cultural competency, to underscore the need for expertise in the essential skills required to care for patients from diverse cultural, ethnic, economic, and geographic communities.

A CONTEXT FOR CAREER-LONG LEARNING AND IMPROVEMENT

An effective way to ensure that family physicians are able to deliver the core attributes of family medicine throughout their careers is to develop a comprehensive lifelong learning program for each family physician based on continuous personal, professional, and clinical practice assessment and improvement. Traditional continuing medical education (CME) has focused on the development of professional knowledge, skills, and attitudes and has operated on a model which assumes that "if they know, they will change." Davis et al[4] describe the difference between traditional CME and continuing professional development (CPD) as follows:

> The difference between CME and CPD for us resides in the venue of the learning or setting of the educational intervention. CME, still in its traditional mode, makes us think of the lecture hall or conference room, often miles, both physically and symbolically, from the real practice setting. On the other hand, CPD can be seen more readily to occur in practice settings, as well as other learning sites, the nearer to the practice setting as possible. Further and perhaps more importantly, CPD reflects the variety of independently developed and managed learning activities that make up the development of a competent practitioner. The phrase more accurately reflects this observation: the theme in adult learning that has emerged over the past 25 years, beginning with Knowles,[5] that adults learn independently of teachers and in a manner that is closely tied to their experience. The term CPD ties the study and practices of facilitating learning to the broader concepts of CPD and adult learning. In this sense, it situates the learning in the learner, perhaps the ultimate venue in which CPD may occur."

While traditional CME has served to meet many of the original tasks for which it was designed, the current model does not meet many of the emerging needs of patients, physicians, or health delivery systems. For this reason, building on the work of Davis et al, traditional CME should be replaced with a CPD process that incorporates personal, professional, and practice development. To build a more dynamic and effective way to support lifelong learning and performance change, this new process must address the needs that accompany the personal and professional developmental challenges encountered throughout the course of a family physician's professional lifetime.

The traditional approach to education for family physicians through medical school and residency has assumed that once the residency program is completed, a family physician enters a state of personal and professional proficiency which only requires maintenance. In reality, the literature strongly suggests that all professionals, including physicians, continuously develop, grow, and change throughout their lifetimes.[5-9] Support for looking at career, professional, and personal development as a framework for meeting the needs of physicians is drawn from basic studies in adult development and learning. Researchers and scholars, such as Knowles,[5] Knox,[6] and Merriam and Caffarella,[7] join researchers in CME to guide medical educators and adult educators to generate learning systems that are based in the needs generated as adults and physicians develop over their careers. Super[10] and Sullivan[11] describe stages and transitions in every career that can lead to learning and change in professional performance. In regard to learning and motivation, Havighurst (in Sullivan) describes "teachable moments" that accompany the transitions adults make in their career and in their personal lives. Bennett and Hotvedt,[12] in analyzing data from 375 physician subjects, describe how stages of development experienced by physicians in their careers help explain learning and change in practice. These studies of adult development and physician learning provide support for a conceptual framework for understanding the ways that stages and

transitions can provide guidance for the needs and learning opportunities of family physicians.

Among the suggestions proposed is that developmental processes and stages of a family medicine career be used to generate a foundation for a lifelong learning curriculum that focuses on physicians' personal, professional, and practice system growth and development. This lifetime curriculum would be iterative in nature, involving self-assessment to identify developmental needs in each domain, participation in structured developmental activities to address those needs, and evaluation of the outcomes of this process, leading in turn to self-assessment and continuing professional development. Central to this process should be a system to ensure active mentoring of physicians throughout their careers.

It is useful to separate this program into 3 components: the development of the family physician as a person, the development of the family physician as a practicing professional, and the development of the family practice patient care environment as a facilitative environment conducive to improved patient and population outcomes.

PERSONAL DEVELOPMENT OF FAMILY PHYSICIANS

Individual family physicians must maintain the service commitment that first attracted them to the specialty. Successful family medicine is more than an intellectual pursuit or business enterprise. The personal commitment to service requires an emotionally and spiritually healthy person. Rest, reflection, and a broader understanding of personal wellness and development must be integral parts of a family physician's practice. Integration into communities of learners will allow family physicians to compare their practices and learn from one another, as well as to socialize and support one another. A formal process of mentoring should begin in residency program and be maintained throughout the lifetime of a family physician. In some respects, new physicians in practice require mentoring, advice, and guidance even more than do students and residents. As the family physician's career progresses, leadership skills and the skills to serve as a mentor for younger physicians become important attributes. A developmental approach to a process of continuous personal development is essential to address adequately the personal attributes that are so important in the New Model of care for family physicians.

In addition, it is important to recognize that the maturation of the discipline and the increasing diversity of many family physicians entering practice today may raise new challenges in family physicians' personal development. The emergence of shared or part-time practices, the rise in dual-career relationships, and the increasing challenges to integrate practice into a balanced personal and family life, all add complexity to the process of personal development for family physicians.

The CPD process that is implemented as part of the New Model of family medicine must account for the real-life challenges of the practicing physician, must be conducive to enhanced practice, must be cost-effective (in both time and monetary measures), and must integrate into the central function of patient care.

PROFESSIONAL DEVELOPMENT OF FAMILY PHYSICIANS

A lifetime curriculum for family physicians should be developed that extends beyond the residency program, throughout the course of a career. This lifetime curriculum should be based on 2 important principles. First, it should be developmental, focused on the most common tasks to be accomplished at each stage of a career. The literature of professional development suggests that many of the tasks of each career stage can be anticipated and that designing educational programs for physicians based on the stage of their careers will result in continuing professional development that is more timely and effective.[9] The second important principal of this professional development program is that it be based on an ongoing system of self-evaluation in which family physicians reflectively evaluate their own professional skills and quality of care in a context that allows them to compare performance with other family physicians, peers, and guidelines for effective care.

The 5 stages in the career of a family physician can be characterized as follows:

1. The new residency graduate: 1 to 2 years after residency
2. The skill-building career stage: 2 to 10 years in practice
3. The mid-career stage: 10 to 20 years in practice
4. The mature family physician: 20+ years in practice
5. The late-career stage: the last 5 years of professional work

These career stages can serve as a template for a CPD program for family physicians. Although some topics may be appropriate for all career stages because they are critical to practicing in the New Model of family medicine (eg, information management, relationship management, process management, interdisciplinary [team] approaches to patient care, communication skills, chronic disease management, health promotion, patient education) or otherwise cross the line between 2 or more career stages (eg, balancing personal and professional interests, professional liability risk management, physi-

cian impairment issues), there are certain issues that are unique to or most appropriately addressed within the context of a particular career stage.

The following are some of the specific elements that might be included in such a lifetime curriculum. They are not intended to be comprehensive or to represent static elements with fixed timelines. Each developmental stage centers on a personal learning plan appropriate to the physician's career stage. Individual physicians pass through career stages at different paces. There may be some overlap of needs between stages, and some may even be repeated as situations change. Such a plan provides a developmental road map that should undergo ongoing assessment and refinement.

The Recent Residency Program Graduate

Several studies over the years have identified the most common challenges facing graduates of the standard family practice residency. These challenges should form the starting point for a lifetime CPD curriculum. While most are commonly encountered early in a physician's career, these issues may reemerge as physicians change practice location, alter their practice focus, or pursue alternative professional roles. Examples of educational issues for recent family medicine residency graduates are making the transition into clinical practice, billing and coding, hospital medical staff requirements and regulations, understanding the process of consultation and referral, and mastering clinical procedures not learned in residency.

The Skill-Building Stage

The skill-building stage encompasses the first 2 to 10 years of a family physician's career. During this period, the skills learned in residency are mastered, and new skills are acquired based on the needs of the community being served. Examples of educational issues for physicians in this career stage might include marketing and building the clinical practice, contracting and third party payment, interviewing and selecting practice partners and employees, public relations and community education, community-specific prevention strategies, and mastering new clinical skills and procedures.

The Mid-Career Stage

At the mid-career stage, the family physician is preparing for positions of leadership, both professionally and personally. Such positions may involve becoming the senior partner in a group practice, assuming a medical staff leadership position at the hospital, or assuming roles of community leadership, such as membership on the local school board. For many family physicians, mid-career typically occurs between 10 and 20 years after entering practice. Examples of educational issues for physicians in this career stage include personnel management, practice innovation and expansion, leadership skills, negotiation skills, and mentoring skills.

The Mature Family Physician

The mature family physician stands at the peak of the profession. Because the mature family physician is a leader in the local community and a role model for new physicians, this career stage involves the greatest demands for leadership and vision. Mature physicians have generally been in practice for about 20 years and are usually in their early 50s. Examples of educational issues for physicians in this career stage include maintaining clinical excellence, governance skills for service on boards and committees, financial planning, alternative career options, personal and professional renewal, and advanced negotiation skills.

The Late-Career Stage

Late-career family physicians are in the final 5 years before retirement. This stage should be a time of reflection and personal and professional fulfillment. Late-career stage physicians are at the peak of their ability to serve in mentoring roles, helping to ensure the continued growth and success of the specialty. The late-career phase often begins when a younger partner assumes the role of practice leader and may involve a reduced schedule of work activities. Examples of educational issues for physicians in this career stage might include transferring leadership responsibilities, making the transition to retirement, concluding physician-patient relationships, leaving a legacy of excellence, and clinical teaching opportunities for late-career physicians.

CONTINUOUS DEVELOPMENT OF CLINICAL PRACTICE

Traditionally, CME has focused on competency and skill development as an attribute of physicians. The future viability of family medicine rests in large part on being able to demonstrate the quality of the care provided. Consequently, the CPD process that is implemented as part of the New Model of family medicine should be based on creating practice behavior changes that result in improved patient outcomes and personal productivity. Whereas a physician's individual excellence is the foundation for such quality of care, systems of care have a powerful impact on the ability of physicians to deliver high-quality, cost-effective care to their patients and communities. Physician competency and skill is a necessary but insufficient component of quality patient care; the final measure of CPD is the development of the delivery system as well as the physician. In addition to the personal and professional development of family

physicians, a specific program should be designed resulting in continuous improvement of the family practice clinical care system. For this to occur, a close working partnership must be developed between academic family medicine and community-based family physicians.

The mission of academic family medicine has generally been directed toward the production of the next generation of family physicians. Academic departments in medical schools are primarily tasked with teaching medical students and promoting careers in family medicine, while family practice residencies are designed to create competent family physicians to enter practice. The academic community in family medicine has been largely successful in accomplishing these tasks, but has been much less successful in providing new information and innovation for practicing family physicians about how the care of patients can be improved. Simply stated, academic family medicine has been focused on producing physicians rather than producing and disseminating innovation. This focus represents a critical deficiency that threatens the survival of the discipline.

In addition, family medicine has been slow to address issues of the quality of care delivered, as measured in patient outcomes. A result has been the direct impact on discussions of scope of practice, the appropriate role of family physicians in the overall health care system, and continued challenges to the intellectual coherence of family medicine as either an academic discipline or a viable practice model.

The process for the continual improvement of clinical practice in family medicine must begin with a close working relationship between the academic community and the practice community. This relationship should be iterative over time, with research creating new practice innovations, which in turn create new questions for the research enterprise. The diagram in Figure 1 illustrates this iterative relationship.

The first elements in this iterative process will involve a vibrant program of scholarship within the discipline of family medicine. The 3 primary components of this scholarship will be:

1. Evidence-based reviews of the medical literature
2. Practice-based research
3. Collaborative translation of existing knowledge and guidelines to enhance primary care relevance

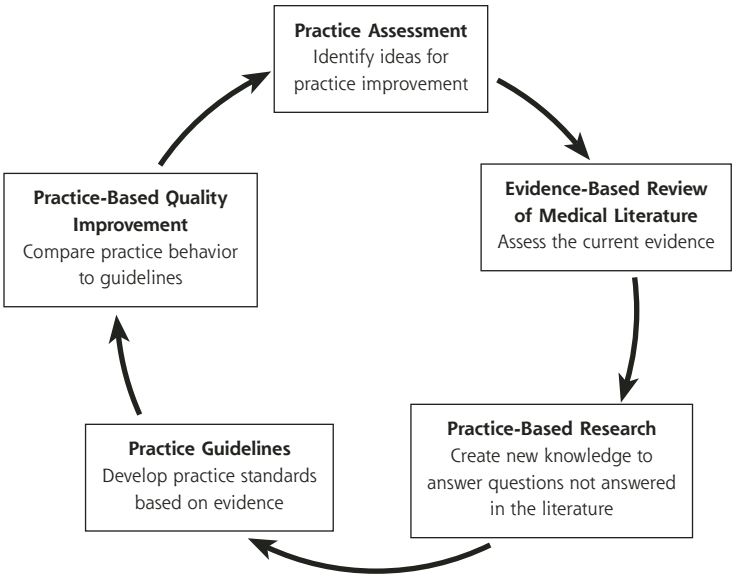
Evidence-based reviews of the literature refers to a process of thoroughly screening the medical literature for information relevant to the care delivered by family physicians to patients and communities. Practice-based research refers to a process of ongoing investigation to address those questions not addressed elsewhere in the medical literature. Taken together, these 2 processes should result in practice guidelines for the care of common problems and clinical situations based upon the best available medical evidence. These guidelines can then be used as the foundation for quality improvement practices in networks of family practice offices where the outcomes of these projects can be measured, thereby allowing new questions and opportunities for innovation to be developed.

The fundamental outcome of this process is demonstrable improvements in patient care; such an outcome will establish the quality benchmark for primary care. The community of practicing family physicians cannot develop this process without their partners in academic family medicine. Neither can the faculty in academic departments identify the problems and questions facing clinical practice without an ongoing relationship with the practice community.

THE ELEMENTS OF CONTINUOUS PRACTICE IMPROVEMENT

There should be an ongoing working partnership that connects the science of family medicine with a process of continuous improvement and innovation in the clinical delivery system for family physicians. Each innova-

Figure 1. Iterative relationship between the academic community and the practice community for continual improvement of clinical practice in family medicine.



tion will create clinical guidelines for practice excellence. Implementation of these guidelines can then be followed by measurement of outcomes as a result of these changes. Examining these outcomes can, in turn, define the changing scientific agenda for the academic field. The matrix in Figure 2 illustrates the relationship among these concepts.

In summary, the traditional process of CME has focused on the skills and attributes of the physician. The new process of CPD will expand this process dramatically to include three components focused on (1) the personal development of family physicians, (2) the professional development of the family physician through each career stage based on a lifetime curriculum, and (3) a process of continuous improvement of the clinical practice that is focused on patient outcomes, rather than simply on physician competence.

MAINTENANCE OF CERTIFICATION AND PRACTICE ENHANCEMENT

Traditionally, CME has been measured in contact hours with prescribed or elective credit awarded to family physicians based on time spent in the activity. The ultimate goal of continuing education, however, is not simply to improve physician knowledge and skill, but rather to change physician and practice behavior and thereby improve patient outcomes. What family medicine currently lacks is a process by which practice groups can work together to assess, measure, and improve the quality of care as measured against broadly recognized benchmarks. CME should be replaced by a system of CPD based on learning modules completed by practice units or groups.

The American Board of Family Practice (ABFP) is to be commended for its move from recertification to maintenance of certification as a measure of the competence of individual physicians. In addition to verification of physician credentials, the new maintenance of certification process requires self assessment using validated, Web-based instruments and patient simulation; a computer-based version of the traditional cognitive examination; and evidence of continuous practice improvement. Physicians will be expected to demonstrate improved patient care through implementation of evidence-based guidelines, meeting benchmarks, measuring quality, and improving patient outcomes. This process will be an essential part of the lifelong assessment of family physicians.

TOOLS FOR PRACTICE ENHANCEMENT

The following components should be part of the comprehensive practice improvement system that is designed for the New Model of family medicine:

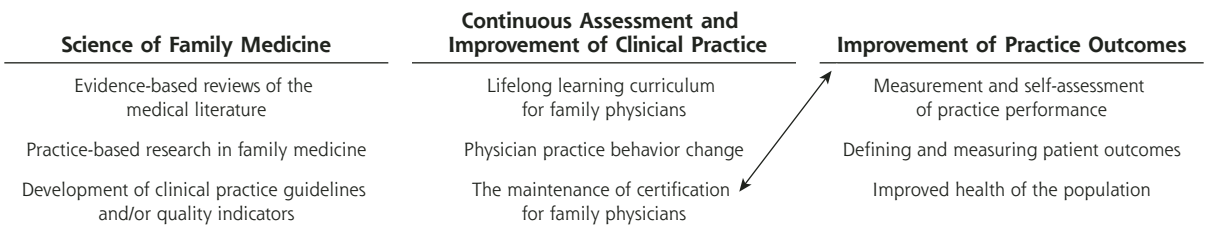
- Standardized electronic information system in family practice offices
- Vibrant process of evidence-based review and practice-based research to define the most up-to-date guidelines for clinical practice
- Self-assessment system to allow physicians to receive timely feedback regarding both their personal skills and their practice outcomes in comparison with their peers

In implementing these practice enhancement tools, it will be essential to have an infrastructure to support multipractice improvement efforts, including a network of family practice offices that can develop and ensure standards of patient care quality and safety.

The Electronic Information System

The future centerpiece of family medicine's care model will be an electronic medical record or information system. It is important, however, to define some of the attributes of this information system so practice networks can collect information in an organized manner. Such a system should be based on a common data dictionary and should be Shareable Content Object Reference Model (SCORM) and Extensible Markup Language (XML) compliant. Any electronic information system used in a family practice office should be capable of collecting a wide range of demographic information about the patient population, including information about occupation, risk factors, and family

Figure 2. Illustration of the relationship among the science of family medidne, continuous improvement, and innovation in clinical delivery system for famiy physician.



relationships. Electronic information systems should also contain an up-to-date and accurate problem and medication lists for each patient and information about each encounter that takes place between the patient and the health care system. This electronic information system should have an export function (linked to Web-based databases that can be used to manage patients on a day-to-day basis, used for collaborative improvement, descriptive studies or clinical trials) that is capable of exporting data elements in a standardized format so they can be analyzed in conjunction with data from other practices to create quality parameters and assessment measures. The system also must comply with all current and future privacy regulations.

This electronic information system must integrate easily into the daily practice of family physicians, must be accessible at reasonable cost, and must result in a major enhancement to the efficiency and quality of the care that is delivered. As a replacement for or a major adjunct to traditional record keeping, this system must be user friendly, flexible enough to integrate a variety of management tasks, stable and reliable, and delivered with appropriate training for physicians with highly variable levels of comfort and experience with such systems.

Evidence-Based Reviews and Practice-Based Research to Define Clinical Practice Guidelines

A central concept behind the continuous practice improvement program will be the use of amalgamated data from multiple practices to define questions of importance to improving the care of family practice patients. The resulting reviews of the medical literature and practice-based research can then be used to develop care guidelines, which will form the foundation of a series of practice improvement modules. Each module will contain tools for self-assessment of the practice, information about the current guidelines and the evidence behind the guidelines, and measurement instruments to allow the practice to measure care outcomes and compare themselves with other family practices.

Practice Self-Assessment Instruments

In addition to allowing the physicians in the practice to assess their knowledge, skills, and attitudes, each practice assessment module will contain instruments that will allow assessment of the quality of patient care, processes, and outcomes while guiding physicians through an improvement effot. The results of this assessment will be sent to a central hub so the practice can receive a report comparing the quality of their practice, as reflected by the self assessment, with other family practices. This report can then be used as a needs assessment to develop continuous quality improvement projects in the practice and to measure improving patient outcomes over time.

RECOGNIZING QUALITY IN PRACTICE: A SYSTEM FOR FAMILY MEDICINE

A process should be developed that would reward quality standards for service and ensure the best outcomes of care delivered in participating family practice offices. One recognition system will be through the ABFP maintenance of certification. Other criteria might include hours of operation, presence of board-certified family physicians within the care model, and scope of services offered in the practice. A central element would also include the participation of the practice in a modular-based CPD program, as described above. Participation in a modular-based program can be the process whereby the discipline can develop a standard package of services offered in all family practices even if the individual skills and attributes of family physicians might differ. Participation in the modular-based CPD curriculum should feed into both the certification process for the individual physicians and a new recognition process for the practice as a group.

The following example illustrates how all of the processes can be tied together. Imagine that a continuous practice improvement module is developed for the care of patients with congestive heart failure. A small family practice group might identify congestive heart failure as an area for self-assessment and potential practice improvement. The physicians, therefore, would request and complete a CPD module on congestive heart failure. Included in this module would be reading materials, audiovisual materials, and computer-based educational training related to the care and management of patients with this disorder.

These physicians would also be required to generate a registry of patients in their practice who have congestive heart failure and review the care of this patient population to determine the degree to which it is consistent with current guidelines as defined in the module. The audit criteria might include an assessment of which medications these patients are using or which diagnostic tests have been performed. The results of this care review would be submitted, along with other self-assessment tools, to the central facility that provided the module, and the physician and practice self-assessment information would be integrated with the self-assessments from all other practices that have completed this module. The result would be an outcome report to the practice indicating the degree to which it is compliant with each of the practice guidelines and comparing the practice with those of its peers. Completion of this module would result in CPD credits

for each of the individual physicians in the practice and might become part of the ABFP maintenance of certification process.

The accumulated data of all practices completing this self-assessment instrument could be used by the department of family medicine at the local medical school to identify important questions about how the quality of care for congestive heart failure can be improved. Linking the CPD activities of the practices with the research agenda of the academic department of family medicine would thereby result in new information, which, in turn, would create new practice guidelines as the module is updated over time. The final and perhaps most important step in this process is that measurable improvement in the outcomes of patient care would become the reference standard by which CPD is measured.

CONCLUSION

This report has presented at least 4 innovations that have the potential to assure family physicians deliver the core attributes of family medicine throughout their careers under the New Model of family medicine. The first of these innovations is that personal and professional development should be linked in a developmental context, based on ongoing self-assessment through the career stages of a family physician. The second innovation is a linkage between continuing education and continuous quality improvement in family medicine practices by the creation of CPD modules as the new foundation for continuing medical education and professional development. The third innovation is a more robust model for peer-to-peer mentoring throughout a family medicine career. The fourth proposed innovation is that family medicine seriously consider a process whereby family practices that actively participate in such a quality improvement process and meet other important standards of practice receive some form of special recognition. By implementing such a system, family medicine can create a common standard for service and outcome for the patients and communities that choose the family medicine model of care. CPD can be developed in such a fashion that it will promote the personal and professional development of America's family physicians and enhance patient care while moving the discipline of family medicine to a position of leadership for generations to come.

RECOMMENDATIONS

Recommendation 1.1. The discipline of family medicine must develop a comprehensive, lifelong learning program for each family physician based on continuous personal, professional, and clinical practice assessment and improvement. The plan must adapt to the career stages of the family physician.

Recommendation 1.2. The continuing professional development process that is implemented as part of the New Model of family medicine should be based on creating practice behavior changes that result in improved patient outcomes and personal productivity. Learning modules that can be completed by practice groups should be used, including tools for self-assessment.

Recommendation 1.3. A close working partnership must be developed between academic family medicine and community-based family physicians to connect the science of family medicine with a process of continuous improvement and innovation in the clinical delivery system for family physicians. Practice-based research should become an inherent part of all family practices.

Recommendation 1.4. A formal process of mentoring should begin in family medicine residency programs and be maintained throughout the lifetime of a family physician.

Recommendation 1.5. A system should be developed to recognize, highlight, and publicize best practices in family medicine.

Recommendation 1.6. Medical schools and family medicine residency programs should incorporate continuing professional development into their curricula.

To read or post commentaries in response to this article, see it online at http://www.annfammed.org/cgi/content/full/2/suppl_1/S65.

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References

1. ACGME Outcome Project. [Accreditation Council for Graduate Medical Education Web site.] Available at: http://www.acgme.org/outcome. Accessed June 30, 2003.
2. Epstein RM, Hundert EM. Defining and assessing professional competence *JAMA.* 2002;287:226-235.
3. Institute of Medicine. Committee on Quality of Health Care in America. *Crossing the Quality Chasm: A New Health System for the 21st Century.* Institute of Medicine. Washington, DC: National Academy Press; 2001.
4. Davis DA, Barnes B, Fox RD. American Medical Association. *The Continuing Professional Development of Physicians: From Research to Practice.* Chicago, Ill: *AMA Press;* 2003.
5. Knowles MS. *The Modern Practice of Adult Education. From Pedagogy to Andragogy.* Rev ed. Wilton, Conn: Association Press; 1980.
6. Knox AB. *Adult Development and Learning.* San Francisco, Calif: Jossey-Bass; 1977.
7. Merriam SB, Caffarella RS. *Learning in Adulthood: A Comprehensive Guide.* 2nd ed. San Francisco, Calif: Jossey-Bass; 1999.
8. Levinson DJ. Toward a conception of the adult life course. In: Smelser NJ, ed. *Themes of Work and Love in Adulthood.* Cambridge, Mass: Harvard University Press; 1980.
9. Fox RD. Continuing professional education. In: Guthrie JW, ed. *Encyclopedia of Education.* 2nd ed. New York, NY: Macmillan Reference USA; 2003.
10. Super D. *The Psychology of Careers.* New York, NY: Harper USA; 1957.
11. Sullivan SE. The changing nature of careers: a review and research agenda. *J Manag.* 1999;25:457.
12. Bennett NL, Hotvedt MO. Stage of career. In: Fox RD, Mazmanian PE, Putnam RW, eds. *Changing and Learning in the Lives of Physicians.* New York, NY: Praeger; 1989

Other Sources

Davis DA, Fox RD: *The Physician as Learner: Linking Research to Practice.* Chicago, Ill: American Medical Association; 1994.

Davis DA, Thomson MA, Oxman AD, Haynes RB: Changing physician performance: a systematic review of the effect of continuing medical education strategies. *JAMA.* 1995;274:700-705.

Fox RD, Bennett NL. Learning and change: implications for continuing medical education [BMJ 1998 series # 3]. *BMJ.* 1998;316:466-468.

Fox RD, Mazmanian PE, Putnam RW. *Changing and Learning in the Lives of Physicians.* New York, NY: Praeger Publications; 1989.

Mazmanian PE, Davis DA. Continuing medical education and the physician as learner: guide to the evidence. *JAMA.* 2002;288:1057-1060