

Bridging the Gap Between Managed Care and Academic Medicine: An Innovative Fellowship

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Abstract

Numerous challenges face academic medicine in the era of managed care. This environment is stimulating the development of innovative educational programs that can adapt to changes in the healthcare system. The U.S. Quality Algorithms® Managed Care Fellowship at Jefferson Medical College is one response to these challenges. Two postresidency physicians are chosen as fellows each year. The 1-year curriculum is organized into four 3-month modules covering such subjects as biostatistics and epidemiology, medical informatics, the theory and practice of managed care, managed care finance, integrated healthcare systems, quality assessment and improvement, clinical parameters and guidelines, utilization management, and risk management. The fellowship may serve as a possible prototype for future post-graduate education.

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In 1910, Flexner concluded that, "The physician's function is fast becoming social and preventive rather than individual and curative."^{1,2} Others² have observed that little has been done to modify medical education during the 80 years since Flexner's advocacy of the physician's social and preventive functions. Rapid, dramatic changes in the healthcare system underscore the need to address this issue,^{3,4} and the shift of power to the marketplace increases the importance of implementing changes in medical education.

Twenty years ago, fewer than 15 million Americans were enrolled in health maintenance organizations (HMOs); today, these entities have more than 56 million members.⁵ However, despite the growth of man-

aged care, physicians have not been trained to deal with the multitude of issues associated with practicing within managed care systems.

Medical education is at a crossroads in terms of reorganization to adjust to the changing role of physicians in society.⁶ Many^{3,5,6-8} have called for the reform of medical education to help practitioners obtain new professional knowledge, and to give them the skills to make them effective caregivers in an evolving healthcare environment. Inui⁹ has identified three factors that will serve as the basis for the remodeling of medical practice and education: (1) a social consensus that the rapid rate of rise in medical care expenditures must be decreased; (2) the increase in managed care; and (3) the emergence of integrated delivery systems.

Inui also identified the following set of core competencies beyond the standard scope of biomedicine that the physician must obtain to be effective in the new healthcare systems: information management, care resource management, integration of guidelines and clinical judgment, enhanced relationships, expanded teamwork, and management to optimize outcomes. If physicians are to provide healthcare effectively in the settings in which they are likely to practice, then the medical education system must address the issue of these "new" competencies.

Several national studies have addressed these changes in the education system. The Pew Health Professions Commission^{10,11} identifies six core concepts with important implications for the preparation of students for practice in the changing, increasingly managed-care-penetrated healthcare environment: (1) healthcare is population based; (2) all participants in healthcare are to be held accountable; (3) the participants use information to ensure value; (4) the role of primary care is central; (5) delivery of care is characterized by interdependence; and (6) the delivery and financing of care are explicitly linked. Each one of these concepts may serve as components of the education programs needed to prepare students for practicing in the new managed care era. Brobst et al¹¹

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define quality improvement in health professions education as "the continuous matching of educational products, activities, or services to the needs of learners."

Academic medical centers (AMCs) and managed care organizations (MCOs) must take on leadership roles and fulfill the needs of learners in the changing healthcare system. Indeed, several collaborations between AMCs and MCOs are evolving.¹²⁻¹⁴ These and other collaborations, including those between business schools and a variety of professional organizations, such as the American College of Physician Executives, are addressing the need for change in physician education. This paper describes one program in a fellowship format that addresses the various issues identified in the many calls for change in medical education.

A New Type of Fellowship

Jefferson Medical College, in Philadelphia, Pennsylvania, and U.S. Healthcare®, Inc., an independent practice association model HMO, in Blue Bell, Pennsylvania, have recognized the need for improvements in medical education. The two organizations therefore devised a strategy to help meet this need. They created a 1-year postresidency fellowship in managed care that has as its mission the training of physicians to understand the theory and practice of quality management in the current complex medical environment. The goal of the fellowship is to enable physicians to take leadership positions in academic medicine or government, or in the development and management of healthcare delivery systems in a variety of public and private settings. Central to the educational objectives are an understanding of what "managed care" is, its past and its future, and how it is driving change in all aspects of the healthcare system. The fellowship is one of the first educational programs of its kind to address the needs of new physicians to effectively function in the evolving healthcare environment.

Structure of the Fellowship

With the support of the Dean of Jefferson Medical College and of U.S. Healthcare, a 3-year commitment to a 1-year postresidency fellowship for two physicians began in 1995. Two codirectors at each site lead the fellowship program: the Director of Health Policy and Clinical Outcomes and the Managing Director of the Center for Research in Medical Education and Health Care at Jefferson Medical College, and the Senior Corporate Medical Director of U.S. Healthcare, and the President of U.S. Quality Algorithms® (the quality measurement subsidiary of U.S. Healthcare).

Two fellows are selected each year from a large pool of physicians who are completing their residency training. Prerequisites include residency training and a strong interest in managed care. Applications are accepted until December, with interviews and final selection occurring in January. The fellowship begins on July 1. Fellows receive an intraining salary at the postgraduate year (PGY) 5 level and are not required to be on call.

U.S. Healthcare contributes the bulk of the fellowship program's financial support, by providing the salaries for the fellows and underwriting some of the administrative costs of the program. Jefferson Medical College, Thomas Jefferson University Hospital, and U.S. Healthcare provide additional in-kind support for research and teaching.

Fellowship Curriculum

The fellowship curriculum is both didactic and experiential and is divided into four modules. Each module is 3 months in length and provides training in specific areas. Each subject is taught through a combination of didactic sessions, which are similar to graduate-level seminars; meetings with staff who work in that particular area; reading in selected literature; and participation in appropriate committee meetings. Generally, one didactic session and one meeting with staff, each lasting 1 1/2 hours, are scheduled daily. Committee meetings in which fellows are regularly involved include the utilization review, pharmacy and therapeutics, and quality assurance committees at Thomas Jefferson University Hospital, and the corporate quality improvement, technology utilization management assessment, and HMO primary care and specialty quality assessment committees at U.S. Healthcare. The topics in the didactic and experiential components of the fellowship curriculum are designed to address the calls for change in medical education outlined in the introduction of this paper.

Subjects in the first module include managed care, biostatistics, epidemiology, and medical informatics. They provide a foundation for the entire fellowship. The goal of the managed care component is to gain an understanding of the historical perspectives of managed care, its current state, and its future directions. The most recent managed care literature forms the basis for the component's discussions and didactic sessions. Meetings with medical directors at U.S. Healthcare offer insight into their roles in a managed care organization and the transition from clinician to manager. Biostatistics and epidemiology provide a basis for medical research, critical reading of the lit-

erature, and an understanding of population-based care. In the medical informatics course, fellows gain a basic understanding of information systems and their important roles in the future of healthcare delivery and research.

Quality is the focus of the second module. Individual components include quality assessment and improvement, clinical parameters and guidelines, and clinical outcomes. Fellows consider the roles of administrative data, chart review, and patient surveys in assessing quality in the managed care setting and discuss the challenges of implementing clinical guidelines. Significant time is devoted to reviewing U.S. Quality Algorithms activity in measuring quality, performance, and outcomes.

The third module focuses on integrated delivery systems and managed care finance. Fellows use case studies and an analysis of the underlying principles of integration and organizational structure to examine trends in integration in the healthcare system. Principles of finance related to managed care are discussed using financial models and examples from current MCOs. Additional guest faculty are drawn from the Widener University Graduate School of Management (Chester, PA), which also cosponsors a 5-year MD/MBA program with Jefferson Medical College.

The fourth module covers utilization management and medicolegal risk management. Fellows examine the use of feedback to and incentives for providers and discuss risk management with respect to both the legal structure under which managed care products are offered and the regulatory requirements that MCOs must meet.

In addition to completing course work in the four modules, each fellow develops and completes at least one graduate-level research project on a managed care-related topic of his or her choosing, presents the project at a medical meeting, and submits the project for publication. The project allows the fellows to apply their new knowledge and skills, and to pursue areas of personal interest.

In order to maintain their patient care skills, the physicians pursue clinical practice in their specialty 1 day per week separate from the fellowship. No degree is offered as part of the fellowship, but many degree programs are available in the Philadelphia area for those who wish to obtain additional education. One of the first fellows enrolled in a local part-time MBA program while in the fellowship program.

Discussion

Despite general recognition of the need for cooperation between academic medicine and managed

care, underlying deep-rooted misunderstandings exist on both sides. The MCOs fear that AMCs will waste limited resources, and AMCs have concerns that MCOs will lower the quality of medical training and the medical care that they provide. Cooperative arrangements between MCOs and AMCs generally have been business-related, "arm's-length" efforts.¹³

Numerous opportunities exist for further cooperation and mutual benefit. For example, AMCs do not expose physicians-in-training to the variety of patients that is representative of the patient mix likely to be seen in practice. A recent medical school graduate may be well educated in the environment of a tertiary care center but may have had little exposure to ambulatory care. MCOs would like the educational system to produce physicians who have received training in ambulatory care, as well as exposure to cost-effectiveness issues.

Research in medical education is another area that would benefit from cooperative efforts between MCOs and AMCs, particularly as medicine continues to move in the direction of prevention and population-based care, rather than focusing on acute illness and individual care. This need may precipitate a shift from the "scholarship of discovery" to the "scholarship of application."¹⁵

Although MCOs that have millions of members also have vast stores of clinical and health services data, much of this information is in a "raw" form and carries the limitations associated with administrative data. Nevertheless, the potential for evaluation and the generation of new information is enormous, and advances in medical information systems will make the data collected by MCOs even more valuable, because of the epidemiologic research potential.

MCOs may lack the resources to make full use of the data that they collect. The AMC, with strengths in clinical medicine and research, therefore, is a coinvestigator, as it has the capability of manipulating and analyzing the data to create new knowledge.^{16,17} New programs, such as the fellowship described in this paper, not only will establish new directions for medical education but will facilitate collaborative research efforts to support research and faculty at the sponsoring AMCs.

What is the proper point of connection between the fellowships and the traditional medical school curriculum? The best answer may be a place in which the managed care and academia cultures are compatible. Clinical evaluation units, characterized by a separate operating unit with a physician director complemented by data analysts, information system specialists, or other technical staff, may be one such place.¹⁸

At what point in the long medical education process should this type of education occur? Collaborative efforts between AMCs and MCOs have focused on medical students and residents, and some may argue that postgraduate training is too late. An effective way to educate students is to train physicians, who then can teach the principles of managed care and integrated healthcare delivery systems. The fellowship format lends itself well to this new type of educational program. Fellowship program topics do not compete for the time and attention of those attending traditional medical training programs, such as medical school or residency; rather, the fellowship is dedicated to the topics of managed care and its effects on the healthcare system.

The fellowship curriculum is designed to meet the calls for change in medical education. The didactic and experiential components address each of the core competencies described by Inui and the PEW Health Professions Commission.⁹⁻¹¹ The fellows also are educated in the underlying factors influencing the remodeling of medical practice and education, as outlined by Inui (ie, concerns about the rapid rise in medical expenditures, the growth of managed care, and the development of integrated delivery systems). In addition to providing training to modify their medical practice, the curriculum enables participants to understand more deeply the forces driving change in healthcare. Moreover, the breadth of topics and depth of study enable fellows to educate other practitioners, and to take active roles in the remodeling of the healthcare system.

Evaluating the outcome of educational innovation is a Jefferson tradition. Jefferson Medical College has created a program that provides longitudinal tracking of its graduating medical students.¹⁹ The graduates of the fellowship program will be tracked through a similar mechanism to assess that program's efficacy.

Who will finance these collaborative efforts? Overall resources are shrinking, and both AMCs and MCOs increasingly are under pressure from purchasers to operate in a cost-effective manner. Given that labor-intensive training programs are expensive, it is unlikely that collaborative efforts can be justified solely on a financial basis. However, the changes in the healthcare system and their ramifications for AMCs and MCOs suggest that a direct financial return on the investment should not be the only funding criterion.

Conclusion

As the delivery of healthcare in the United States evolves, academic medicine must change as well, by

developing physicians who have received training in managed care. Thus, the focus of medical education must shift from fee-for-service, specialty, and hospital care to cost-effective primary and ambulatory care in managed care settings.

Jefferson Medical College and U.S. Quality Algorithms have accepted this challenge by creating a fellowship that provides a basis for collaboration and a model for others. The 1-year postresidency fellowship is designed to address the calls for change in medical education, and to train a new breed of physicians with the knowledge and skills consistent with the changes in the healthcare delivery system. The fellowship represents a model for cooperation between MCOs and AMCs at a time when both types of organizations are seeking to establish mutually beneficial roles in the healthcare system. We believe that physicians completing this type of fellowship will be prepared to take leadership roles in medical education, clinical practice, and hospital or managed care administration.

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