A Program for Family Medicine in an Era of Cost Constraints

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Medical care in the United States is entering a new era: The Era of Cost Constraints. The dominant forces leading to this era are economic, social, and political. Throughout the decade preceding the new era, health care costs rose at an alarming rate both in absolute dollar terms and as a percentage of the gross national product (GNP). In 1973 the annual expenditures for health care were $103.2 billion, representing 7.8 percent of the GNP, while a decade later in 1983, they stood at $355 billion, or 10.8 percent of the GNP. The economic consequences of these burgeoning health care costs were keenly felt in both the public and private sectors.

The federal government faced astounding budget deficits hovering around the $200 billion level annually. Limited in its ability and willingness to raise revenues through taxation or to lower spending in defense, the federal government targeted its two major health insurance programs for reductions: Medicare and Medicaid.

At the same time, business and industry observed their worldwide competitive positions weaken, partially as a result of the larger burden of health care costs in their price structure when compared with their international competitors. In response, business and industry implemented a number of private sector initiatives to reduce health care costs. These initiatives included contracting with preferred provider organizations (PPOs) for discounts, concurrent utilization review, manadatory second opinions for surgery, preadmission testing, increased deductibles and copayments, workplace wellness programs, and incentives for outpatient surgery. At the instigation of their business clients, private insurers have instituted more aggressive claims reviews, concurrent and prospective utilization review, and active management of benefits.[1]

No description of the economic transformation of medicine would be complete without mention of the increase in for-profit medicine. The recent history of health care in the United States is characterized by the rapid growth of investor-owned for-profit hospitals, home health care agencies, health maintenance organizations (HMOs), and other health services. Medicine has become increasingly more competitive and business-like.

Contributing to this economic transformation of medicine are a number of social factors. Physician manpower, once in short supply, is now widely believed to be oversupplied. The surplus of physicians has led to a decrease in physician autonomy, an increase of numbers of physicians working in salaried or hourly positions, and an increase in physician migration.

Several recent articles[2,3] have exorted family medicine educators to address the issues of health care costs and cost-efficient health care in predoctoral, graduate, and continuing medical education. This article examines the challenge that these changes pose for family medicine educators and offers ways in which the academic family medicine community can effectively respond.

THE PREDOCTORAL PROGRAM

Since their emergence within medical schools, departments of family medicine have focused their predoctoral educational efforts on teaching medical students about the art and science of family practice,[4] achieved largely through family practice preceptorships and clerkships. Overall it appears that these programs have been successful in meeting their goals and are generally well received by the students. The emerging Era of Cost Constraints, however, demands that departments of family medicine consider certain

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modifications of this successful model. Prudent adjustments will enhance the relevance and appeal of these programs to today's medical students who will practice in tomorrow's world.

First, predoctoral programs should address specifically the issues of cost-effective patient care. This approach is not a radical departure from what these programs are already doing, although cost-effective care is often only an implicit goal. By their very nature family physicians serve as gatekeepers to the medical care system and have the trust of their patients that decisions will be made wisely and prudently.[5] It is this aspect of the family physician's role that must be made explicit to the students. Preceptors should be encouraged to discuss specifically with their students health care cost issues and their rationale for making certain decisions.

What preceptors demonstrate as cost-effective behavior in practice, full-time faculty should complement through formal educational activities. Seminars on clinical decision making should be conducted as part of the family medicine clerkship. Students should understand concepts of sensitivity, specificity, predictive value, and how to make decisions on testing and treating based upon those concepts.

Practice management is another dimension that should be emphasized. Some programs already include practice management as a goal in their curriculum. Care should be taken to gear the experience to the level of a medical student, rather than a resident about to enter practice. Preceptors should discuss the role of nonphysician health professionals in the practice, how patients are scheduled, the extent to which different health insurance plans cover costs, and how decisions are made about purchasing certain types of office equipment. Again, full-time faculty can complement the clinical experience by addressing the same area in formal teaching sessions.

Likewise, the faculty should address contemporary health care delivery issues as part of the curriculum. Students should be familiar with such health insurance concepts as deductibles, copayments, and exclusions and their effect on utilization and health outcomes. Different systems of health care delivery should be explored with students including health maintenance organizations, preferred provider organizations, and ambulatory surgicenters. The Era of Cost Constraints provides many avenues in which the faculty can lead students to debate controversies concerning physician ownership of health care facilities, the growth of investor-owned hospitals, health care for the poor, and rationing.

Finally, clerkships offer an excellent opportunity for students to gain first-hand experience with the world of diagnosis-related groups (DRGs), concurrent utilization review, preadmission testing, mandatory second-opinion programs, professional review organizations (PROs), and so forth. Specific learning experiences can be built around these issues using innovative teaching techniques such as role playing, case studies, and field trips.

In addition to these suggested emphases on well-established predoctoral family medicine programs, a slightly different orientation in the way departments of family medicine view their mission in medical schools seems indicated. The recent report of the panel on the General Preparation and Education of Physicians (GPEP Report)[6] stressed the need for breadth in predoctoral medical education and an avoidance of premature specialization. No other department is better positioned to carry out this recommendation than is the department of family medicine.

Departments of family medicine would be wise to articulate their role in medical schools as one that focuses on the general medical education of all students rather than limiting their role only to those students interested in a career in family practice. The core curriculum offered by departments of family medicine should be shaped to meet the needs of the generic physician. Supplementary elective experiences can be tailored more to the future family physician. This subtle but important difference will enhance the department's legitimacy and effectiveness in the academic community.

Likewise, departments of family medicine should view the other primary care specialties as valuable allies rather than rivals in the predoctoral curriculum. Not only do the similarities of interests, attitudes, values, knowledge, and skills that exist among family medicine, general internal medicine, pediatrics, and community health outweigh any differences, but also the difficulties and obstacles faced by the primary care disciplines in the academic world are quite similar: the struggle for legitimacy, the need to identify a discreet focus of scholarship, and the efforts to gain access to students and curriculum time. New collaborative mechanisms should be developed to allow these disciplines to marshall their resources and enhance their effectiveness and presence in the medical school curriculum.

THE RESIDENCY PROGRAM

On first inspection the Era of Cost Constraints seems to pose a threat to graduate medical education. Gloomy predictions are being made about reducing residency positions and freezing or even lowering residents' salaries.[7] On closer inspection, however, the changes inherent in cost constraints bode well for family medicine residency programs.

The concerns being raised about excessive positions and excessive lengths of training in residency programs apply almost exclusively to the nonprimary care specialties. Cutbacks in the number of positions or restrictions on funding of residents' salaries through Medicare or other third party payers should not have a negative impact on family practice residencies.

Faced with increasing pressures to constrain hospital costs, hospital administrators will find family practice residencies to be invaluable assets to their hospitals. First, family physicians value the importance of the family and the home in the care of patients and are more disposed to keep hospitalizations as short as possible. Family medicine faculty, however, need to exert a more concerted effort to reinforce this natural tendency through education and example. For instance, faculty should expect discharge planning to be placed on the problem list of each patient on the first day of admission. This problem should be discussed on rounds along with diagnostic and management plans. Residents should establish close, personal working relationships with visiting nurses and home health care agencies in the community. A rotation on a home health service should become a mandatory part of all family practice residency programs.

Second, family practice residents are less likely to be heavy utilizers of ancillary hospital services and less likely to be disposed to order expensive and risky invasive procedures. Again, the faculty need to reinforce these existing tendencies to use other services parsimoniously. Faculty should challenge residents to justify their orders using the theories and principles of clinical decision making. Grand rounds and other conferences should include a discussion of cost effectiveness and debate different protocols for care for a given diagnosis. Working with hospital administration, residency directors should create a data information system that can attribute costs and diagnoses to specific residents or residency teams. Utilization and cost data can then be used as feedback to the residents and identify outliers.

Third, the presence of residents in a hospital provides a bonus to the hospital in the DRG system through the indirect educational cost formula that is based on a resident-to-bed ratio.

Fourth, family practice residency programs can save the hospital money in its outpatient services. As most outpatient services run at a loss, this benefit often has not been appreciated. However, the addition of a family practice residency program can reduce the magnitude of the loss, even if it cannot turn a profit.

RESEARCH

In the Era of Cost Constraints competition for traditional sources of research funding will become more intense. Realistically, family medicine faculty are not likely to fare well in the scramble for support from the National Institutes of Health (NIH). Yet, research opportunities abound in the areas of health care utilization, clinical studies, clinical decision making, technology assessment, preventive medicine, patient education, personal health practices, and medical education.

Family physicians often cite the adage, "common things happen commonly and rare things happen rarely" in terms of clinical diagnosis. They often lose sight of this important truth in considering what constitutes meaningful subjects for research, however. The societal impact of disease relates both to its severity and to its prevalence. There has been a tendency to focus research attention on very severe but relatively uncommon diseases, in part because subspecialists see a higher prevalence of these diseases in their referral practices. As a result of their obvious severity, these diseases also possess a certain glamor that attracts research support.

Family physicians have been missing the forest for the trees. Low-severity but high-prevalence diseases have been relatively neglected as the focus of intensive research efforts. For example, the average case of rheumatoid arthritis might be five times more severe than the average case of osteoarthritis, but the prevalence of the latter may be up to 20 times higher. Therefore, the value to society in limiting the disability associated with osteoarthritis would have a real monetary payoff 400 percent greater than an equal gain in limiting disability with rheumatoid arthritis. This consideration is not merely theoretical. Business and industry would realize considerable benefits by reducing medical expenses, time lost from work, and disability costs, not to mention the benefits in quality of life that would accrue to the millions who suffer from this disease.

To strengthen this argument, the issue should also be viewed as an example of marginal benefit analysis. As a disease progresses to greater stages of severity, the amount of benefit derived from the allocation of a fixed amount of resources diminishes. Thus society stands to gain the greatest benefit for its health care dollar by focusing on interventions at the earlier stages of diseases, including primary and secondary prevention. And what kind of physician sees those patients? The family physician.

That certain diseases are common does not imply that the research methodology will be simple. The same scientific rigor applied to research of esoteric disease needs to be applied to common diseases. Once again, the need for collaboration among the primary care disciplines and community health is clear. Though the diseases may be relatively common, the diversity of a primary care practice population requires large numbers of patients to be available to yield subpopulations of adequate size for research. Furthermore, an effective research team requires many and diversified talents including those of the clinician, epidemiologist, biostatistician, administrator, behavioral scientist, data information specialist, and others. It would be rare for a single department or division in primary care to possess such an array of talent, but together careful staff planning could assemble such a team.

Another useful aspect of collaboration can result from the family medicine, primary care internal

medicine, and pediatrics clinics often being based in different sites. This fortuitous arrangement can be exploited in the creation of experimental models that utilize an experimental-control crossover time series model. Such a design is particularly well suited to quasi-experimental educational research, where contamination is often a vexing problem.

CLINICAL SERVICES

The Era of Cost Constraints will stimulate forward-thinking departments of family medicine to view the provision of clinical services more broadly than merely the place where residents sharpen their clinical acumen. The family practice center will become a laboratory itself in experimenting with new models for the cost-effective delivery of health care.

The director of clinical services should seek ways to increase productivity in the center. Data systems need to be in place that will permit effective management of the whole system and all its components. Data systems themselves need to be carefully evaluated in terms of their cost efficiency.

New ways of organizing and utilizing the mix of providers should be examined. Residents concerned about their education need to be reassured by pointing out that the lessons they learn about efficient practice management will be valuable to them in the near future. The successful practicing physician will need to be a skilled manager and effective team member as well as a competent clinician. Residents should be actively involved in planning the practice and evaluating its performance.

Tensions may exist between the family practice center and the private practicing community as competition for patients grow. This competition is likely to be less severe for family practice than for those nonprimary care specialties that are greatly oversupplied. Though some tension is unavoidable, it can be moderated by freezing the size of the residency program and, in some cases, even by contracting its size. The bottom line should be practice productivity in which patient volume increases while fixed costs are maintained or lowered and variable costs are tightly controlled. A family practice residency with low productivity is cheating the residents out of a good preparation for their future roles as well as jeopardizing its own future. If patient volume cannot be expanded without unacceptable consequences, then the hard choice must be made to contract the residency. This option is one that most residency directors and hospital administrators will want to avoid.

Finally, family medicine faculty in cooperation with hospital and medical school administrators should be actively involved in strategic planning. This involvement requires the faculty to be intimately familiar with the local community, its demography, economy, epidemiology, and health care system. The special place and role of the department, the hospital, and the medical school in the community, the region, and the state need to be constantly assessed and reassessed, both for the present and, more importantly, for the future. Trends must be carefully considered. The department must be properly positioned to take advantage of changes. In this endeavor the role of the department chairman is crucial. The department chairman must understand the mission of the institution and constantly hold it before the faculty. Decisions must be made that will serve that mission and not made merely for opportunistic reasons. The successful chairman must possess great prudence and wisdom.

FACULTY DEVELOPMENT

Family medicine faculty will need to acquire new skills and knowledge to respond effectively to the challenges of the Era of Cost Constraints. For junior faculty situated within medical schools, this need is imperative. Junior faculty must be able to fulfill the emerging new roles that will be demanded of them as teachers, scholars, and clinicians.

Departments of family medicine will find it difficult, if not impossible, to increase their faculty to accommodate the changing environment. Given this scenario, department chairmen will demand more from their existing faculty.

The challenge to the discipline is to create faculty development programs that will produce individuals capable of meeting the new demands. The standard three-year family practice residency program is insufficient for this task, though it should be more than adequate for training family physicians capable of successful practice outside the academic domain. What is needed are fellowship and graduate programs specifically suited for the aspiring family medicine academician. A few such programs already exist, but are insufficient in numbers to meet the demands.

Ideally, these programs should be two years in length and capable of being integrated with existing residency programs. The first year of the program, focusing on formal learning experiences in the classroom, could run concurrently with the third year of a residency program by utilizing elective time. The second year should focus on supervised but independent research and practical teaching assignments in the medical school.

Recruiting residents into these programs will not be sufficient in the short term. Existing junior faculty need to be encouraged to participate in these programs. The economic and practical obstacles are intimidating, however, and new approaches to overcome these obstacles are needed. One possibility is the institution of an early sabbatical program in which high-potential junior faculty could be partially supported by their hospitals and departments while enrolled in these programs. In return, the junior faculty member would

promise to return to the sponsoring department for at least six years following the program.

Special programs should also be developed for family medicine chairmen designed to enhance their skills as managers in the Era of Cost Constraints. Particular attention should be paid to strategic planning.

Finally, ongoing programs should be conducted that aim at keeping faculty abreast of new developments and controversies. These programs should stimulate faculty to consider opportunities for scholarly work, ideas for teaching, and innovations in practice. An interdisciplinary program in which all the primary care specialties participated would maximize the quality and scope of the presentations and the creativity of the participants' discussions.

CONCLUSIONS

The Era of Cost Constraints brings with it both challenges and opportunities for family medicine educators. The two major challenges are reduced resources and changing expectations.

The opportunities for family medicine in the Era of Cost Constraints are bountiful. Family medicine faculty can assume the leading role in the general education of medical students by the very nature of the breadth and scope of the specialty. Together with the other primary care specialties and community health, they can shape the medical education curriculum for the 21st century.

The coming reconfiguration of graduate medical education can enhance the position and strength of family medicine and other primary care specialty residency programs. The attractiveness of these specialties, already increased by the changing nature of medical practice, can be enhanced further by modifications in the residency curriculum and ambulatory services.

The special research niche for family medicine faculty and their colleagues in primary care and community health can be found in the area of benefit-adjusted research.

Certain prerequisites are needed to exploit fully these opportunities. Commitments must be made to increasing productivity, coalition-building among the primary care specialties and community health, faculty development, scholarship, and strategic planning.

Family medicine is still a young, vigorous, and innovative discipline, relatively unfettered by ossified concepts of immutable traditions. This flexibility should enable energetic and resourceful departments to move forward successfully in an Era of Cost Constraints.

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