PEDIATRICS Vol. 101 No. 4 April 1998 735

Pediatric Residency Training in An Era of Managed Care: An Introduction to Proceedings of a National Conference

Jonathan A. Finkelstein, MD, MPH

ABSTRACT. On May 4, 1996, a conference sponsored jointly by the Division of Medicine of the Health Resources and Services Administration and the Ambulatory Pediatric Association brought together pediatric educators from academic medical centers and managed care organizations to address the challenges and opportunities for pediatric residency training, given current trends toward increasing managed care for children. This supplement is designed to bring the issues discussed there to a broader audience of pediatricians and educators. The contributions are written by the participants of that conference, with invited commentaries to add additional perspectives on each topic. The papers were reviewed by an editorial board of leaders in pediatric education with experience in relevant areas. This introduction describes the impetus for the conference and highlights a number of critical issues facing pediatric postgraduate training that are presented in greater depth in the contributions that follow. Finally, this paper summarizes the recommendations of the conference for meeting the challenges of training pediatricians in these areas. Pediatrics 1998; 101:735–738; managed care, pediatric residency, graduate medical education.

ABBREVIATIONS. MCO, managed care organization; HRSA, Health Resources and Services Administration; APA, Ambulatory Pediatric Association; COGME, Council on Graduate Medical Education; AHC, academic health center; GME, graduate medical education.

The growth of managed care in all of its forms is reshaping all aspects of the US medical care system. Approximately 80% of individuals currently receive care through some type of managed care arrangement (including point of service, preferred provider plans, and health maintenance organizations).1 Managed care can be broadly defined as the delivery of care to a defined population within fixed resources, usually with assignment of each covered member to a primary care clinician responsible for his or her care. However, the term includes an increasing number of both funding and care delivery arrangements. Patients receiving care in staff model health maintenance organizations are now far outnumbered by looser network arrangements. Managed care organizations (MCOs) can be investor-owned, for-profit corporations, or not-for-profit entities. Some are owned by or closely affiliated with medical schools and academic health centers. The arrangements and incentives under which physicians care for patients also vary from full capitation (in which a clinician or group is given a fixed amount to provide for the medical care of its panel) to more complex financing arrangements, with incentives, holdbacks, and carve-outs of various kinds.

Whatever the details of these financing and care arrangements, it has become clear to many that current training programs do not adequately prepare graduates to function optimally in these systems.2,3 This has implications for the efficiency of these organizations and medical care costs, but also for the care of the patients who are served. A growing literature addresses how undergraduate and graduate medical training can meet these new challenges. Seminal reports have been published by the Council on Graduate Medical Education (COGME)4 and the Pew Commission’s Advisory Panel on Medical Care and Graduate Education.5 Most recently, the report “Preparing Learners for Practice in a Managed Care Environment” by Lurie for COGME6 presents a synthesis of core competencies drawn from a broad literature on education for managed care practice. However, as shown in the literature review in this issue,7 there has been relatively little focus on pediatric training and the delivery of care to children. HRSA and the APA jointly recognized a need to initiate a discussion of both the challenges and the opportunities that confront pediatricians and those who educate them.

This conference sought to address three major questions:

1. What are the core concepts and competencies for practice in a managed care environment that should be integrated into pediatric residency training, and in what training sites and resident activities will these best be learned?
2. What are the funding and organizational challenges for residency training programs in this era of managed care, and how can we overcome the barriers between managed care and academic centers to meet them?
3. What are specific recommendations directed toward training programs; the APA, HRSA, and other government agencies, and private foundations that could improve pediatric residency training in managed care competencies?
We begin this compendium with an article by Palfrey et al on the range of health issues that currently confront children and that systems of managed care, and the clinicians who work within them, will need to address to improve and sustain child health. Pediatric care will continue to become more complex as our ability to treat and sustain children with a variety of chronic conditions improves. The continued advances in genetics and other technologies will make the knowledge base required of pediatricians ever more formidable. The impact of social and economic problems will continue to contribute substantially to child morbidity and mortality. Pediatricians will need to be trained to address all of these in the evolving delivery systems in which they will practice.

The first several contributions in this issue focus on specific aspects of the curriculum that must be reinvented to train pediatricians in an era of managed care. The contribution by Devries et al outlines a framework for the skills that pediatricians in training will need to acquire. It should be emphasized that these new topics for training cannot replace the foundation in biologically based clinical pediatrics and the skills of interpersonal communication that remain the core of medical training and practice. Rather, we must supplement this core teaching with skills that will allow trainees to function in the current environment and to adjust effectively to whatever new care delivery systems may evolve. In the past, “health care policy” topics were seen as nonessential add-ons to residency training. Now, the skills that Devries et al outline are those that will be needed to practice effectively. If we fail to enable pediatricians to develop these skills, it is the children under their care who will ultimately suffer.

Chessare and Headrick et al highlight particular domains that should be major topics of residency training. In his paper, Chessare outlines why evidence-based medicine is integral to effective managed care practice. We should point out that the profession of medicine has always had its roots in scientific evidence, and as pediatricians we have always sought to provide care that is truly effective in treating illness and promoting health. What is new is the widespread recognition that resources for health care are limited; therefore, providing services of real benefit and not using resources for interventions without benefit will be one of the underlying cornerstones of maximizing child health. Admittedly, much of the current practice of pediatrics is not based on direct evidence of benefit. We do many things because we believe that they work based on indirect evidence, imperfect studies, and personal and collective experience. It would be a mistake to suddenly stop providing care for which there is broad consensus among members of the profession because we lack immediately available evidence from randomized trials of improved outcomes. The new focus on evidence-based care should be seen as defining an agenda for research that separates effective care for children from ineffective strategies for diagnosis and treatment. Prevention, a cornerstone of pediatric practice, also must be evaluated to see where the focus of pediatricians’ time and effort will deliver the greatest benefits to children. If we are aggressive and imaginative in harnessing the population laboratories of managed care systems, we will have the ability to answer many of the questions about the benefits of pediatric care that have been elusive to date.

Headrick et al give us a framework for integrating the theory and skills of quality improvement into residency training. Quality improvement is more than just a fad or a lingo. It can be seen as the application of scientific principles to the processes of providing care. Simply put, the plan–do–study–act cycle is nothing more than collecting empirical data to inform innovation and monitor improvements in outcome. It is what we have always done in the laboratory and in clinical research now applied in a rational way to improve care delivery.

In his contribution, Badgett provides a perspective gained from managing a resident continuity clinic and faculty practice as a managed care provider. He shows that effective teaching and care can exist and compete in a managed care marketplace, but identifies specific barriers that must be overcome.

The debate over the specialist–generalist balance in pediatrics stirs great controversy. Williams et al outline the threats to both care and training, given funding priorities that attempt to decrease the number of specialists in the pediatric work force. Regardless of whether the perfect balance is ever achieved (or even known), it is clear that evolving pediatric training programs will need to maintain broad exposure to pediatric subspecialty problems. In fact, integrated delivery systems will demand comanagement of children with complex problems by pediatric primary care clinicians and subspecialists. Training both parties for their respective roles will be critical to providing optimal care for children with a variety of complex subspecialty problems.

In fact, pediatric academic health centers (AHCs) across the country are confronted with major challenges in achieving their missions in both clinical care and training. The need to bring down costs of care, especially inpatient care, to compete with nonacademic hospitals and maintain “market share” has become critical to sustaining the academic mission. The next series of articles focus on the financial and organizational challenges that pediatric residency training will confront in the next decade.

Bazell and Salsberg begin by describing the revolution in graduate medical education (GME) funding and its impact on pediatric training. Specifically, they foresee severing the current link between GME funds and reimbursement for inpatient hospital stays through Medicare. Many of the new funding mechanisms under consideration will promote training in ambulatory sites and may actively address what is seen as the generalist–specialist imbalance by many in the federal government. Although this shake-up in the major source of funding for AHCs is seen by many as a grave threat, free-standing children’s hospitals have never benefited from the Medicare GME reimbursements. If pediatric training institutions
help shape the current debate, new funding mechanisms may enable enhancements to pediatric residency training such as increased exposure to community settings.

In their contribution to this supplement, Frazier et al13 use the experience of Children's Hospital of Philadelphia in a health care market with rapidly increasing penetration of managed care to outline one set of responses to these challenges. They address the pressures confronted by a tertiary pediatric center to reduce inpatient costs, as well as their development of an integrated delivery system for pediatric care with a wide catchment area. Care, they suggest, will be delivered whenever possible in community settings; pediatric subspecialists likewise will travel to see patients closer to their homes. They envision fewer clinical cases on inpatient services of tertiary centers appropriate for house officer training in general pediatrics and a shift in the case mix of inpatients to those children with complex multisystem problems. Therefore, training residents for the future will necessitate using more decentralized settings effectively for education as well as for care.

One constructive response to these changes may be for AHCs to join as partners with MCOs. The barriers to such collaborations are clearly articulated by Osborn and Norlin,16 but new models for engagement between hospitals and managed care are emerging and may ultimately benefit both the organizations and the pediatricians in training.

As in all periods of change, there are both significant risks and great opportunities for pediatricians and children in the current evolution of the medical care system. Those who are responsible for teaching pediatricians must be willing to think radically about how our sites, methods, and agendas for training will allow pediatricians to function optimally in the coming decades. To be successful in making this adjustment, we will need to be constantly aware of how we can strengthen the pediatrician–family relationship of respect and trust based on the mutual assumption that the pediatrician will act in the best interest of each child under his or her care. At the same time, physicians in the coming decades will be increasingly challenged to think in terms of using resources to maximize child health in populations. Pediatricians, more than other physician groups, have a long history of seeing beyond individual patient encounters to the health of children in communities. We express this when we promote universal immunization, teach in local schools, and lobby in Washington, DC, for the needs of children. Clearly, in a managed care world, there will be incentives to maximize the health of a physician's panel. However, there also may be new opportunities, by harnessing managed care systems, to address the health of children in communities. For example, violence-prevention programs that involve both schools and managed care systems could benefit the children, the community, and the managed care plans.

Seizing the opportunities of managed care for improving pediatric care, teaching, and research will require the next generation of pediatricians to work effectively in more complex systems of care than those that have existed at any time in the history of medicine. We have entered an era in which being the archetypal "good doctor" still is necessary but not nearly sufficient to maximize child health. Pediatricians in training need to continue to perfect clinical skills, learn to build effective partnerships with children and families, understand how to utilize resources for health effectively, and develop the skills to shape the health systems in which they work. Including all of these in the 3-year training period will be a challenge for educators who themselves may not be comfortable with the new knowledge and skills they will be required to teach. As pediatric educators, we must approach these new challenges with the same energy and commitment with which we have embraced teaching other innovations in medicine.

RECOMMENDATIONS OF THE CONFERENCE

The assembled group formulated recommendations aimed at immediate improvements in pediatric residency training in a managed care environment. These recommendations were aimed at government, other potential funders, and MCOs.

Faculty and Curriculum Development
1. Support the creation of curricula in the areas of evidence-based medicine, cost-effectiveness, population-based care, quality improvement, and other managed care competencies. Consider partnership with other organizations (eg, American Association of Health Plans) and other specialties in these activities.
2. Increase funding for targeted faculty development in teaching these skills effectively, as well as general faculty development for teaching in managed care settings.
3. Support experimentation with novel curricular models in teaching hospitals as well as in managed care settings.

Development of Effective Teaching Strategies and Collaborations
1. Fund empirical studies to test educational strategies for use in managed care settings.
2. Work with general pediatricians and MCOs to establish self-sustaining and financially independent model training sites. Use these sites to collect data and carefully study their replicability.
3. Foster new partnerships between MCOs and universities in developing new residency programs, and encourage joint sponsorship of residency programs by MCOs and medical schools.

Dissemination of Best Practices for Pediatric Training in managed care
1. Sponsor and fund conferences to allow for continued exchange of information among pediatric educators on this topic.
2. Create a program of consulting led by the APA that would offer visiting faculty to training programs or MCOs interested in expanding pediatric training.

Measurement of Outcomes of Innovative Programs
1. Fund studies that determine whether involvement of MCOs and educational innovation focused on managed care competencies produces graduates more effective in working in, and with, managed care systems.

RECENT DEVELOPMENTS
Several developments since the conference was held have advanced many of the goals expressed by the participants. The Pew Charitable Trusts, long interested in medical education, have made a 3-year, $8.3 million commitment of support to Partnerships for Quality Education,17 a program that seeks to catalyze the development of partnerships between academic medical centers and managed care that will enhance medical student and resident education in managed care competencies. The program office is located in the Department of Ambulatory Care and Prevention, a joint academic department of Harvard Medical School and Harvard Pilgrim Health Care. To date, there are eight funded project sites (and a number of unfunded affiliate partnerships), each of which represents the collaboration between an academic medical center and a managed care setting. The partnerships are developing new curricula as well as building novel training sites and strategies in managed care environments. A major goal of this project is to make the lessons learned by these innovative programs accessible to other academic health centers and managed care entities seeking to engage in partnerships of their own. It is true that only a minority and managed care entities seeking to engage in partnerships of their own. It is true that only a minority of MCOs and educational innovation focused on managed care that will enhance medical student and resident education in managed care competencies. The program office is located in the Department of Ambulatory Care and Prevention, a joint academic department of Harvard Medical School and Harvard Pilgrim Health Care. To date, there are eight funded project sites (and a number of unfunded affiliate partnerships), each of which represents the collaboration between an academic medical center and a managed care setting. The partnerships are developing new curricula as well as building novel training sites and strategies in managed care environments. A major goal of this project is to make the lessons learned by these innovative programs accessible to other academic health centers and managed care entities seeking to engage in partnerships of their own. It is true that only a minority of managed care systems are now actively involved in teaching. By producing a number of model flight plans, this initiative has great potential for encouraging others to get off the ground.

SUMMARY
This conference, sponsored jointly by HRSA and the APA, was a unique opportunity for pediatric educators to discuss, as a group, issues of care financing and delivery that will undoubtedly affect the future of pediatric training. The meeting participants highlighted major areas of concern and proposed ideas for overcoming some of the challenges pediatric training will confront. These challenges, and potential solutions, are developed further in the contributions in this supplement. The contributors and participants hope that this supplement will mark the beginning of increasing dialogue among pediatric educators in academic centers and MCOs and will lead to innovations in training that will benefit the pediatricians of tomorrow and the children and families they serve.

REFERENCES
4. Council on Graduate Medical Education. Sixth report. Managed Health Care: Implications for the Physician Workforce and Medical Education. Rockville, MD: Bureau of Health Professions, Health Resources and Services Administration. DHHS Pub HRSA-P-DM-95.2. 1995
Pediatric Residency Training in An Era of Managed Care: An Introduction to Proceedings of a National Conference
Jonathan A. Finkelstein
Pediatrics 1998;101;735

Updated Information & Services including high resolution figures, can be found at: /content/101/Supplement_3/735.full.html

Subspecialty Collections This article, along with others on similar topics, appears in the following collection(s):
Medical Education /cgi/collection/medical_education_sub
Teaching/Curriculum Development /cgi/collection/teaching_curriculum_dev_sub

Permissions & Licensing Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: /site/misc/Permissions.xhtml

Reprints Information about ordering reprints can be found online: /site/misc/reprints.xhtml

PEDIATRICS is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. PEDIATRICS is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 1998 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 0031-4005. Online ISSN: 1098-4275.
Pediatric Residency Training in An Era of Managed Care: An Introduction to Proceedings of a National Conference

Jonathan A. Finkelstein

*Pediatrics* 1998;101;735

The online version of this article, along with updated information and services, is located on the World Wide Web at:

/content/101/Supplement_3/735.full.html