The Robert Wood Johnson Clinical

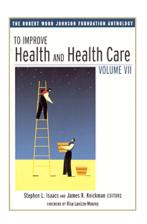
Scholars Program

BY JONATHAN SHOWSTACK, ARLYSS ANDERSON ROTHMAN, LAURA C. LEVITON AND LEWIS G. SANDY



Chapter Five, excerpted from the Robert Wood Johnson Foundation Anthology:

To Improve Health and Health Care, Volume VII



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Editor's Introduction

Since its earliest days, the Robert Wood Johnson Foundation has recognized the importance of developing leadership capacity in the health sector. Between 1972 and the present, the Foundation has committed nearly \$775 million to programs designed to improve the health care workforce. Many of these programs have been the topics of chapters in the Robert Wood Johnson Foundation *Anthology*.¹

The Clinical Scholars Program, the Foundation's longest-running initiative, is often referred to as its flagship program. Since 1972, the Foundation, through this program, has supported postdoctoral training for young physicians interested in research and leadership careers in health policy. The result is a fraternity of more than nine hundred physicians who have participated in the program and helped to shape the field of health services research.

This chapter examines the Clinical Scholars Program from its inception and builds on a recent evaluation of it conducted by the University of California, San Francisco, or UCSF. It explains why a philanthropy such as the Robert Wood Johnson Foundation would be interested in an expensive, long-term investment like the Clinical Scholars Program and describes how this program has influenced the fields of medicine and health services research over the past 35 years. It also raises thoughtful questions about the continued logic of such an initiative in the current health care world.

The chapter was written by Jonathan Showstack, a professor at UCSF, who led the recent evaluation; Arlyss Anderson Rothman, an assistant professor of family health care nursing at UCSF, who participated in the evaluation; Laura Leviton, a senior evaluation officer at the Robert Wood Johnson Foundation; and Lewis Sandy, the Foundation's former executive vice president, who oversaw the Clinical Scholars Program while he was at the Foundation.

Isaacs, S.L., Sandy, L.G., and Schroeder, S.A. "Improving the Health Care Workforce: Perspectives from 24 Years' Experience."
In To Improve Health and Health Care 1997: The Robert Wood Johnson Foundation Anthology. San Francisco: Jossey-Bass, 1997; Keenan, T. "Support of Nurse Practitioners and Physician Assistants." In To Improve Health Care 1998-1999: The Robert Wood Johnson Anthology. San Francisco: Jossey-Bass, 1998; Frank, R.S. "The Health Policy Fellowships Program."
In To Improve Health and Health Care, Vol. V: The Robert Wood Johnson Foundation Anthology. San Francisco: Jossey-Bass, 2002; Colby, D.C. "Building Health Policy Research Capacity in the Social Sciences." In To Improve Health and Health Care, Vol. VI: The Robert Wood Johnson Foundation Anthology. San Francisco: Jossey-Bass, 2003.

2. The Robert Wood Johnson Foundation took over and modified the program, which had been started by the Carnegie Corporation of New York and the Commonwealth Fund in 1969.

The five senior professors of medicine were an unlikely group to start a revolution. It was the late 1960s, however—a time of social turmoil, idealism, and questioning the status quo. As the professors had lunch together on the final day of a conference on medical education, they were uneasy about the business-as-usual discussions at the meeting. All of them had seen their schools grow rapidly as new research and patient care dollars flowed from the government, yet they shared a concern that all was not right with the way physicians were being educated. Many of their medical students wanted to put action behind their idealism, to spend their careers in policy positions where they could have an impact, not in white coats in a biomedical lab. The professors also recognized that changes in society would have an enormous impact on health and health care over the coming decades and that these changes would require a new type of physician—one who could ask and answer new kinds of questions, understand the changes that were occurring, and have the skills necessary to design, implement, and evaluate new ways of delivering care.

As luck would have it, Margaret Mahoney, a program officer at the Carnegie Corporation of New York, which was sponsoring the conference, was also at the table, and she encouraged them to develop their ideas and send a proposal to her. What resulted from these discussions was the Clinical Scholars Program.

With support from the Carnegie Corporation and the Commonwealth Fund, the Clinical Scholars Program started in 1969 with the funding of five initial sites, each directed by one of the professors of medicine: John Beck at McGill University Faculty of Medicine; Halsted Holman at Stanford University School of Medicine; Julius Krevans at The Johns Hopkins University School of Medicine; Austin Weisberger at Case Western Reserve School of Medicine; and James Wyngaarden at Duke University School of Medicine.

In order to expand and provide long-term support for the Clinical Scholars Program, in 1972 the Robert Wood Johnson Foundation, then a newly established philanthropy, assumed responsibility for the program. The Foundation's new president was David Rogers, a former dean of the school of medicine at Johns Hopkins and someone who was also acutely aware of the issues facing the health care system. The

Foundation was interested in identifying and funding new efforts to achieve its goal of improving the health and health care of the American people, and the Clinical Scholars Program seemed like a perfect fit. Both Margaret Mahoney and Terrance Keenan, a program officer at the Commonwealth Fund, had joined the Robert Wood Johnson Foundation staff and would help administer the program, with the name officially changed to the Robert Wood Johnson Clinical Scholars Program. Among other changes that occurred in the early years of sponsorship were the formalization of the application process, the formation of a National Advisory Committee consisting of leaders in medicine and health care, and a new competition for site funding, with some of the original sites not being refunded and new sites added. Beck moved to the University of California, San Francisco, to direct the program initially. Annie Lea Shuster, then a program officer at the Robert Wood Johnson Foundation, assumed responsibility for overseeing the program and continued in this role for over two decades.

THE NEED

Why was a new type of fellowship program needed? Physicians in training can generally become licensed to practice medicine after one year of post-medical school training—their internship year. Beginning in the 1930s, however, residencies extended this training with the goal of certification in a particular specialty. To be eligible for certification, internists, for example, need three years of post-medical school education, which is generally performed at a teaching hospital that is associated with a medical school.

The tremendous increase in medical knowledge in the 1950s and 1960s, and the application of this knowledge through new procedures and technologies, created an incentive to subspecialize, that is, to add several additional years of training after the residency in a particular aspect of care. This type of training is known as a fellowship and can extend training for an additional two years or more. By the late 1960s, for example, it was common for internists to subspecialize in cardiology, gastroenterology, or infectious disease; for pediatricians to subspecialize in neonatology; and for surgeons to subspecialize in orthopedics.

While this trend toward subspecialization was a logical response to a growing knowledge base in medicine, it tended to create physicians whose training was deep but narrow. What kind of physician would retain a broad perspective on health, health care, and medicine in the future? At least in part in reaction to the trend toward subspecialization, family medicine was established as a specialty in the late 1960s to train physicians in a broad set of skills, including care of both adults and children and the ability to perform minor surgery. These family physicians would practice in a wide range of settings and geographic areas. Similarly, in the

late 1970s general internal medicine programs were established to train internists to be primary care physicians.

Although subspecialty training produced highly skilled physicians, the five professors of medicine had the foresight to know that the changing health care environment also required physicians with a different type of specialized skills. The next generation of leaders in medicine would need to pose research questions on the organization and financing of health services; on the contribution of medical care to overall population health; and on the relationships between economic, social, and demographic forces on health care, just to name a few areas of inquiry. They would need to work closely with administrators and policy-makers to design and implement new systems of care to take advantage of new knowledge and technology and to address the inevitable social, ethical, economic, and legal issues and dilemmas facing American medicine and society.

Heretofore, for a physician who was interested in a career in community or population health, the educational choices were relatively limited—perhaps one or two years at a school of public health or a stint with the Epidemic Intelligence Service of the Centers for Disease Control. No fellowship program, however, provided an integrated educational experience that would give participants the knowledge and skills in population health, epidemiology, research methods, health care organization, economics, and health policy that would be needed by future leaders in medicine.

The Clinical Scholars Program was designed to produce scholarly physician-leaders with the understanding and the skills necessary to have a major influence on health care policy, to help create and build the relatively new field of health services research, and to thrive in academic medicine. It was conceived as, and continues to be, a two-year fellowship for physicians who have completed their initial clinical training, with most Clinical Scholars joining the program directly after residency.

Over the past 30 years, the program's goals have remained relatively constant while the program itself has gone through expansions and contractions, the eligibility criteria for appointment as a Clinical Scholar have broadened, and program sites have changed. The methods used at each of the sites have generally included seminars in health policy, epidemiology, biostatistics, research methods, and economics, and an applied research experience. Over time, sites have tended to develop unique areas of emphasis. Yale, for example, focused on clinical epidemiology; UCLA, on health services research; and the joint University of California, San Francisco-Stanford site, on chronic illness. This specialization was a useful way to

attract scholars with particular interests and to use the sometimes unique resources available at each site. Scholars are expected to design and conduct a relevant research project during their fellowship, as well as to continue caring for patients (to maintain their clinical skills and to ground their academic experience in the reality of today's health care system).

THE CLINICAL SCHOLARS

To date, the program has had over nine hundred graduates. Most Clinical Scholars begin their careers within academic medicine, undertaking policy-relevant health services research. Over time, many have become leaders in health policy, health services research, clinical epidemiology and population health. Graduates have become directors of major federal, state, and local health agencies and departments, chairs of departments in medical schools, chief executive officers of hospitals, influential researchers in the fields of health services and health economics, and foundation executives (including the current president and the former executive vice president of the Robert Wood Johnson Foundation). Among the program's alumni, there are approximately 150 full professors and over 20 current chairs of medical school departments. More than 30 former Clinical Scholars have been elected to the Institute of Medicine of the National Academy of Sciences. Although many Clinical Scholars choose to work within their training institutions after completion of the program, graduates have dispersed geographically throughout the United States and are found in every state.

Participants in the Clinical Scholars Program have come from many areas of medicine. The majority were trained in internal medicine, with pediatricians the next largest group, followed by those trained in family medicine, psychiatry, obstetrics and gynecology, preventive medicine, emergency medicine, surgery, occupational medicine, community medicine, radiology, and public health. Although the majority of Clinical Scholars have been men, in recent years there have been approximately equal numbers of men and women in the program.

PROGRAM IMPACT

The Clinical Scholars Program has had an impact on health policy and health services research; on the sites where the program has been implemented; on other fellowships; and on the Foundation itself.

Impact on Health Policy and Health Services Research

By making a long-term commitment to training hundreds of clinicians in health services and health policy research, the program helped legitimize and institutionalize these fields within academic medicine. In contrast to the early years of the program, when health services research was a foreign concept in

academic medicine, virtually all research-intensive medical schools now have active health services research programs. The National Institutes of Health, the leading funder of medical research, has added this kind of research to its agenda, and physicians, along with social scientists, are now leaders in the field.

Clinical Scholars have been involved in some of the most influential studies in health policy over the past 30 years. For example, former Clinical Scholar Robert Brook played a major role in the RAND Health Insurance Experiment, a landmark study to determine whether increased copayments for patients would affect their utilization of medical services. In the late 1970s and early 1980s, former Clinical Scholars published studies demonstrating wide variation in the use of medical procedures in different regions of the United States and a resulting overuse, underuse, and misuse of therapies. These studies led to an increased focus on clinical practice guidelines, for which the expertise of Clinical Scholars and other physician-researchers was critical.

Studies such as these and the growing influence of health services researchers in academia catalyzed the development of a national infrastructure for health policy and health services research, which, in turn, created new opportunities for Clinical Scholars. In 1989, Congress created the Agency for Health Care Policy and Research to fund outcomes research and develop practice guidelines. The agency (now the Agency for Healthcare Research and Quality) has provided funding to physician health services researchers and wielded a considerable influence on efforts to improve the quality of medical care. In 1997, former Clinical Scholar John Eisenberg became the agency's director (a position he held until his death in 2002), and the program's graduates have held high-level positions in the Centers for Medicare & Medicaid Services (formerly the Health Care Financing Administration).

Impact on the Program Sites and on Other Fellowships

In supporting institutions as training sites for the Clinical Scholars Program, the Foundation offered more than just stipend support for those selected as Clinical Scholars; it also provided funding for the program's site director and core faculty members at the sites, essentially building a small academic unit. In a 1992 evaluation of the program, Harvard University health economist Rashi Fein and then-president of New York City's Mt. Sinai Medical Center John Rowe spoke with deans and department chairs of medical schools participating in the Clinical Scholars Program, all of whom agreed that the program had changed the intellectual climate of their institutions for the better. It had, they said, increased the interest in and respect for epidemiological research and led to more health services research, even outside the program's traditional base of departments of medicine and pediatrics. Additionally, the subject matter of

To Improve Health and Health Care, Volume VII

the Clinical Scholars Program had influenced the schools' curricula. Finally, the host institutions consistently showed an interest in keeping Clinical Scholars on their faculty after they completed the program.

The unpublished report by Fein and Rowe noted that academic leaders at the University of Pennsylvania credited the Clinical Scholars Program with helping to foster an academic program in geriatrics; that Clinical Scholars and the program's faculty at Yale had supported development of multidisciplinary geriatric research; and that the program's faculty at the University of Washington had developed courses for the Clinical Scholars that were later added to the general curriculum.

In addition, the Fein and Rowe report pointed out that a substantial number of training opportunities could be said to derive in part from the Clinical Scholars Program. These included the National Research Service Awards and the Physician Scientist Awards, both given by the National Institutes of Health or its component institutes. In addition, at least 13 institutions had created programs similar to Clinical Scholars with other funding.

Impact on the Robert Wood Johnson Foundation

The Clinical Scholars Program has influenced the Foundation's grantmaking in a number of ways. First, the Foundation's leadership and staff regularly call upon former Clinical Scholars as experts, consultants, or program directors. Second, the research and policy interests of Clinical Scholars have helped inform the Foundation of important, emerging areas. For example, in the mid-1980s former Clinical Scholars William Knaus and Joanne Lynn became interested in improving end-of-life care. This interest led the Foundation to fund SUPPORT, a landmark study on improving care and respecting the wishes of dying patients and, later, to a major initiative to improve the quality of care toward the end of people's lives.

Third, the program has had an impact on the Foundation's grantmaking strategies. Because the Clinical Scholars is widely regarded within the Foundation as successful, it has served as the model, to one degree or another, for other Foundation fellowship programs. For example, the proposal for the Scholars in Health Policy Research Program, which is designed to attract top-tier economists, political scientists, and sociologists into health policy research, pointed out that, as in the case of Clinical Scholars, the "prestige factor" would help increase attention to health policy research among these disciplines. To achieve this level of prestige, the program is located at highly rated universities and aims at attracting the very best young Ph.D.'s into health policy research. The program aspires, as well, to have the same kind of positive

effects on faculty, curriculum, and the field of health services research as the Clinical Scholars Program has had.

More generally, the widely perceived success of the Clinical Scholars Program provides a justification for the Foundation's investments in human capital. Identifying, supporting, and nurturing leaders is believed to be an effective long-term philanthropic strategy, although one whose payoff is difficult to measure and may not be readily discernable for a decade or more. Recognizing this, the Robert Wood Johnson Foundation recently created a team and grantmaking portfolio dedicated to supporting the development of human capital.

CLINICAL SCHOLARS IN A CHANGING MARKETPLACE

Medicine and American society have undergone major changes since the program's birth in the late 1960s. After enjoying almost unfettered growth in the 1960s and 1970s, academic medicine began to face the financial challenges of a changing marketplace. From the 1970s through the early 1990s, the health care system grew with seemingly little restraint. Academic health centers were among the chief beneficiaries of this growth. Jobs in health care were plentiful; there were great career opportunities in health care administration and policy; faculties in medical schools were expanding rapidly; and funding for research was readily available. Times were good for the graduates of the Clinical Scholars Program.

In their 1992 evaluation, Fein and Rowe concluded that the program was successful, praising it as "a national treasure." They recommended that it be continued, with some adjustments, such as changing the locations of program sites and holding new competitions for them. These recommendations were adopted.

At about the time that Fein and Rowe assessed the program, great changes in health care and medical education were beginning to appear. These were to have a significant impact on the program.

First, resources did not flow into medical care as rapidly as before, and increased competition and lower reimbursement began eating into the revenues of academic health centers. By the late 1990s, there were disquieting signs that the graduates of the Clinical Scholars Program were not finding the job market as expansive as did their predecessors.

Second, perhaps because of the success of the Clinical Scholars Program, a number of new fellowship programs had been developed in the late 1980s and 1990s that competed directly for the same pool of

applicants as the Clinical Scholars Program. These included the National Research Service Awards, the Veterans Administration National Quality Scholars Fellowship Program, career development awards from the National Institutes of Health and Agency for Healthcare Research and Quality, and general internal medicine fellowships. Many of these competing fellowship programs included training that was similar to that received by the Clinical Scholars and were both easier to get into and shorter in length.

Third, the 1990s saw significant demographic and financial changes in health care. The most important of these changes were the increased number of women in medical schools (the entering medical school class in the late 1980s was about one-third female; today it is about half), the ebb and flow of interest in primary care, and the increasing debt incurred by medical students due to rising tuition costs. Women's career paths and lifestyle choices tend to differ from men's, largely because of childbearing and family commitments. This makes spending additional years in fellowship programs a less desirable option for many women. A decreased interest in primary care—which occurred in the late 1990s—diminished the pool of physicians of the kind who normally apply to become Clinical Scholars. In addition, the financial burden of medical school may have caused some young physicians to reject fellowship training in favor of taking jobs directly after residency training and paying off their debts.

As the renewal of the Clinical Scholars Program approached in the late 1990s, the Foundation felt that it was time to reassess the program. To inform discussions about the future directions of the Clinical Scholars Program, the Foundation asked a team at UCSF to examine whether the Clinical Scholars Program was still a popular choice among potential applicants and whether the career progression of Clinical Scholars was as rapid as in past years.

To assess the attractiveness of the program, UCSF conducted a survey of the career choices of those who traditionally consider applying to the Clinical Scholars Program—second- and third-year primary care residents in family medicine, general internal medicine, and pediatrics. In a second part of the study, all current and former Clinical Scholars were asked to complete a survey about their experience in the Clinical Scholars Program, their career paths, and current positions. In this way, the career paths of Clinical Scholars who graduated in different periods could be compared. In all, over six hundred residents responded to the first survey, and nearly half of the over nine hundred current and former scholars responded.

Future Scholars: The Career Goals of Today's Primary Care Residents
The primary career goal of the majority of the residents who responded to the survey was clinical
practice. General internal medicine and pediatric residents were three times as likely as family medicine
residents to indicate academia as a possible job option.

The main reasons that the residents were considering fellowship training were to specialize, to increase their knowledge, and as a route into academics. As shown in Figure 5.1, two-thirds of internal medicine residents, about one-half of pediatrics residents, and about a third of family medicine residents indicated an interest in fellowship training. Only one in 10 said that they would apply to a nonsubspecialty fellowship, and only a handful mentioned the Clinical Scholars Program as a possibility.

The national reputation of a fellowship program, its placement of graduates, and its research reputation were rated as important by most residents, with family medicine residents placing less emphasis on research reputation. The most highly rated attribute for a fellowship program was the availability of a mentor, followed by the quality of the program as evidenced by its national reputation and the recommendation of an adviser. Other important considerations in choosing a program included the location of the fellowship, suitability for a partner, and the availability of research support and protected time.

Most primary care residents who were considering further training intended to apply to a subspecialty fellowship, with only a small portion (7%) considering applying to a nonsubspecialty program. Sponsorship by the Robert Wood Johnson Foundation was rated as important by relatively few (13 percent) of the residents.

These results suggest that the Clinical Scholars Program may not be as competitive and attractive a choice for primary care residents as it was in earlier years.

In addition, the results emphasize the importance of mentoring and the overall quality of the program. The data provided important lessons for the program going forward. In particular, the mentoring component, always a strong element, would receive even greater emphasis in the years ahead.

The Career Trajectories of Clinical Scholars

Almost half of the current and former scholars replied to the survey. Most Clinical Scholars identified an academic career as a goal at the time that they were considering the Clinical Scholars Program, with only

a small number identifying other options, such as government or clinical practice. The perceived quality of the Clinical Scholars Program was the most influential factor in scholars' decisions to apply to the program; this was particularly true for more recent Clinical Scholars.

The debt burden of recent medical school graduates and changes in social needs had an increasingly important effect on the fellowship choices made by scholars. As shown in Figure 5.2, financial constraints were not mentioned by scholars who had graduated in the 1970s, but these constraints had an increasing impact over time. Partner preferences, including family, employment, and other issues, affected only about one in seven scholars in the 1970s, but over a third of them in the 1990s.

The vast majority of scholars (87 percent overall) said that they had gained what they had hoped for from the program, with one in four saying that they achieved the maximum benefit from the program that they thought possible. There was, however, a small but important increase in the proportion of scholars in the 1990s cohort who said that they had gained only part or none of what they had hoped. Additional gains that had not been anticipated included networking, program content, career development, and mentoring. A small proportion, but increasing over time, said that there was a need for better mentoring, and the need for an additional (third) year was mentioned by a number of more recent Clinical Scholars.

In the program's first two decades, most graduates of the Clinical Scholars Program were able to obtain the type of job that they desired. During the 1990s, however, a decreasing proportion of scholars said that they were able to obtain the type of job that they wanted. Compared with Clinical Scholars in earlier years, approximately twice as many scholars in the 1990s found their job searches to be more difficult than expected.

The first job for three out of four Clinical Scholars after they completed the program was in academia. In the early years of the program, career progression was quite rapid; over one-quarter advanced to the level of associate professor within five years of graduation from the Clinical Scholars Program. In recent years, the program's graduates began their academic careers in lower-level positions (lectureship and similar positions rather than assistant professor positions, and fewer scholars in tenure-track positions), and their rate of advancement slowed significantly (see Figure 5.3).

The perception of the program's graduates about their careers mirrors these objective data. Most scholars who graduated in the 1970s are satisfied with the rate at which their career has progressed. This has

changed dramatically in recent years, however, with nearly 40 percent of recent Clinical Scholars being dissatisfied with their rate of career progression (see Figure 5.4).

Implications for the Clinical Scholars Program

The surveys of primary care residents and current and former Clinical Scholars suggest a more competitive environment for fellowship programs as they try to attract applicants and for graduates of the Clinical Scholars Program as they enter the job market. The high proportion of primary care residents, especially of general internal medicine residents, who intend to subspecialize is sobering. The trend toward subspecialization by primary care residents and their general lack of awareness of the Robert Wood Johnson Foundation or the Clinical Scholars Program suggest that the potential pool of applicants for the program has declined and may continue to decline over time. Or it may well be that the traditional sources of Clinical Scholars will become a smaller proportion of the applicant pool, with more Clinical Scholars applying from medical and surgical specialties.

There has been a clear and significant increase in the challenges faced by recent scholars in their ability to get the jobs that they want and in their overall career advancement. In a sense, the very success of the Clinical Scholars Program may be the indirect cause of some of the difficulties faced by recent graduates of the program, with increasing competition from graduates of similar fellowships for a relatively limited number of jobs. Perhaps the most important finding from the survey of current and former Clinical Scholars, however, was their overwhelming endorsement of the program.

THE FUTURE

With its emphasis on health services research and health care policy, the Clinical Scholars Program was unique among fellowship programs available in the 1970s and early 1980s. The program has been, and continues to be, impressive. Changes in medical care and in society as a whole present new challenges as the program enters its fourth decade.

In 2002, as the Robert Wood Johnson Foundation considered the future of the program, the record of its graduates, and the changing environment in medicine and health care, a number of options emerged. One option was to "declare victory" and devote resources to other programs and challenges. Another option was to take an "if it isn't broken, don't fix it" position and continue the program with minor changes. What the Foundation ultimately decided, however, was to revamp the Clinical Scholars

THE ROBERT WOOD JOHNSON FOUNDATION ANTHOLOGY

To Improve Health and Health Care, Volume VII

Program in a way that would continue its aims, while structuring it for the 21-century environment in academic medicine and society. It did this in five ways.

First, as it had done previously, the Foundation launched a new, national competition for sites; these new sites would enroll Clinical Scholars beginning in 2005. Second, it adjusted the program to give greater structure to the core curriculum, more explicit productivity expectations, and more emphasis on primary data collection and community-based research. Third, it added an optional third year (available by application to the program). Fourth, it created a whole new program for early career development to provide support for recent graduates of the Clinical Scholars Program, as well as those from other similar fellowship programs. This new program, approved by the Foundation's trustees in 2002, will provide new opportunities for mentoring and networking for current and former Clinical Scholars. Finally, it shifted the program's leadership and placed it under the direction of Iris Litt, the Marron and Mary Elizabeth Kendrick Professor of Pediatrics at Stanford University.

While it may take a decade or more to determine the impact of the program changes, the Foundation believes that investing in talented young people continues to be a good bet and a winning philanthropic strategy. As was the case in the late 1960s, when the five senior professors of medicine saw a need for a new type of fellowship program, profound changes continue to occur in society and in the medical care system that require new and innovative ways to prevent illness and to care for those who become ill. Outstanding clinicians, trained to ask and answer important questions, well versed in the policy process, and with an inclination toward action that improves health and health care, will continue to make a positive impact.

Notes

¹ Fein, R., and Rowe, J. *A Review of the Clinical Scholars Program*. (Unpublished). Report prepared for the Robert Wood Johnson Foundation, 1992.

TABLES

5.1 Clinical Scholar Program Sites

FIGURES

- 5.1 Residents Interested in Fellowship Training
- 5.2 Issues Affecting Choice of Fellowship
- 5.3 Rate of Advancement
- 5.4 Satisfaction with Career Progression