Robert Wood Johnson Foundation

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Generalist Provider Research Initiative

An RWJF national program

SUMMARY

The Robert Wood Johnson Foundation (RWJF) launched the *Generalist Provider Research Initiative* in 1993 as part of an overall strategy to increase the number of generalist physicians relative to specialists. It was authorized by RWJF's Board of Trustees for up to $3 million and managed internally by RWJF staff with technical assistance early on from the University of Wisconsin-Madison School of Medicine.

The *Generalist Provider Research Initiative* supported a series of research projects that addressed determinants of the generalist/specialist ratio and opportunities for—and constraints to—change.

RWJF staff hoped that the findings of the projects would provide policy makers, educators, and health care providers with the information they needed to take action to strengthen the role of generalists in the delivery of primary care and alter the imbalance in generalist versus specialist services.

Key Results

The *Generalist Provider Research Initiative* funded a total of 12 studies (see the Project list for links to Program Results on each study). The research agenda consisted of the following nine topic areas:

- The consequences of generalist versus specialist care on the costs of care and medical outcomes.
- The market dynamics of the use of various forms of labor resources in the health care sector.
- Possible public and private actions to be taken to limit the number of specialists.
- Determinants of patient preferences for generalist versus specialist care.
- Determinants of residency choice.
- Factors that influence the job satisfaction of generalist physicians.
- Factors that affect the choice of generalists to practice in underserved areas.

- The relative impact of changes in medical school admission processes, medical training environments, and practice entry incentives on the supply and distribution of generalist physicians.
- The impact of changes in the organization of health care on the demand and need for generalists.

Project directors disseminated their findings through numerous publications they generated—many of them in refereed journals such as the *Journal of the American Medical Association,* the *Journal of General Internal Medicine,* and the *American Journal of Public Health.*

Some of the findings received widespread coverage in medical newsletters and in mass media such as the *New York Times,* the *Boston Globe,* and National Public Radio.

RWJF Strategy

The *Generalist Provider Research Initiative* was one of four programs launched by RWJF in the early 1990s to address the issue of bolstering the percentage of generalist physicians.

The other three programs were the:

- *Generalist Physician Faculty Scholars Program.*
- *The Generalist Physician Initiative.*
- *Practice Sights: State Primary Care Initiative.*

THE PROBLEM

Modern American medicine took shape in the early part of the 20th century with the gradual establishment of standards for medical education and licensing. Until shortly after World War II, medical education focused primarily on developing a standard, nationwide system of undergraduate and graduate education based on scientific principles, research, and supervised clinical experience.

During that period, most American physicians were general, or family, practitioners who provided their patients with care and assistance regarding health matters. Specialists were in relatively small number.

The category of generalists is usually understood to consist of family physicians, general internists, and general pediatricians.

Their fundamental role in the health care system is that of primary care physicians, meaning, those who:

- Provide first-contact care.
- Assume responsibility for patients over time regardless of the presence or absence of disease.
- Act as coordinators for all of the heath care needs of their patients.

The definition of primary care proposed by the Institute of Medicine (IOM) in 1978 has been the one most used and most commonly quoted: "accessible, comprehensive, coordinated and continual care delivered by accountable providers of personal health services."

A more recent, 1996, version of the IOM's definition reads: "Primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community."

Specialization Begins

In the early 1950s, the trend toward specialization began to accelerate. Many developments contributed to that change. The growth of medical knowledge based on biomedical research played a significant role. Increased financial support from the federal government encouraged investments in specialized research facilities and medical technologies.

As medical schools grew in size and complexity, they became better suited to a training system emphasizing specialized care. The trend was also reinforced by a number of other factors. For example:

- Specialists enjoyed higher financial compensation and greater prestige than generalists.
- Most of the medical role models that students were exposed to tended to be specialists rather than generalists.
- Methods of reimbursement for physicians and hospitals tended to support the expanded use of medical technologies, and, therefore, an increased reliance on the medical specialists needed to apply them.

The trend toward specialization translated into a growing dominance of specialists in the health care system and a relative decline in the number of generalists.

According to data from the National Center for Health Statistics, the percentage of generalists among active U.S. physicians has declined steadily from 50.1 percent of a

total of nearly 200,000 active physicians in 1949 to 33.5 percent of 547,000 active physicians in 1990.

The 1998 percentage of 32.7 percent of 667,000 active physicians indicates that the trend may be flattening out.

A 1966 report by the American Medical Association Citizens Commission on Graduate Medical Education entitled *The Graduate Education of Physicians*—known as the Millis report after the name of its chairman, John Millis, M.D., of Case Western Reserve University in Cleveland—is generally considered the first to have focused attention on this issue.

The commission recognized that growth in specialization had been necessary because of rapid growth in medical knowledge. It also noted that specialization had led to fragmentation of care.

The report called for graduate education of the primary care physician.

The changes in medical education that followed—for example, formal accreditation of family practice programs—did not significantly reverse the trend toward specialization despite similar conclusions and recommendations by other commissions and organizations in subsequent years.

Calls For More Generalists

In the late 1980s, the Council on Graduate Medical Education (COGME) concluded that the nation's physician workforce was not well matched to public needs and that it had too few generalist and minority physicians, too many specialists, and poor geographic distribution of physicians.

COGME recommended to Congress that at least 50 percent of residency graduates should enter practice as generalist physicians:

- Family physicians
- General internists
- General pediatricians.

COGME also concluded in its Third Report to Congress in 1988: "A rational health care system must be based upon an infrastructure consisting of a majority of generalist physicians trained to provide quality primary care and an appropriate mix of other specialists to meet health care needs.

Today, other specialists and sub-specialists provide a significant amount of primary care. However, physicians who are trained, practice, and receive continuing education in the

generalist disciplines provide more comprehensive and cost-effective care than non-primary care specialists and subspecialists."

Quality, efficiency, and cost of care were COGME's main concerns, and those concerns became shared throughout most of the health policy community.

CONTEXT

Starting in the early 1990s, the RWJF Board of Trustees authorized a set of programs with the common purpose of reducing the dominance of specialty medicine in the provision of health care in the United States. The programs were:

- *The Generalist Physician Initiative*, authorized in July 1991, focused on ways to increase the supply of generalist physicians by encouraging changes in medical education.
- *Practice Sights: State Primary Care Initiative*, authorized in October 1991, focused on ways to induce generalist providers to practice in underserved areas.
- *The Generalist Physician Faculty Scholars Program*, authorized in April 1992, focused on ways to enhance the careers and prestige of generalist faculty in academic medical centers.

All three programs addressed major RWJF goals—to ensure access to basic health care for all Americans and to help the American public deal with the problems of rising health care costs.

RWJF staff shared the view that improving the position and influence of generalist providers would increase access to primary care and possibly reduce costs through both preventive and less technologically intensive practices.

RWJF staff first considered conducting formal evaluations of the programs but then decided that a broader range of research studies would be more effective in producing information useful to the public policy process.

As a result, RWJF staff launched the *Generalist Provider Research Initiative*. While some of the studies under the national program would enable RWJF to assess some of its generalist/specialist-related initiatives, the studies were not structured as traditional evaluations.

The research also was planned to build on a number of other promising research initiatives on related topics that had been funded by RWJF, the federal government, or others.

PROGRAM DESIGN

RWJF formed the *Generalist Provider Research Initiative* to fund research to identify, analyze, and assess opportunities and constraints that would have an impact on the generalist/specialist mix.

RWJF staff also conceived the initiative as an alternative approach to traditional program evaluation. Instead of asking a typical question in a program evaluation, such as, What did we learn? RWJF staff asked a different question:

What lessons do we need to learn but we have not yet been able to learn from existing programs?

To find out, the *Generalist Provider Research Initiative* planned to explore new research areas as well as make use of existing research. The projects centered on a research agenda developed with the assistance of 14 outside experts on generalist and specialist practice who gathered in November 1992. (See the Appendix for details.)

The research agenda consisted of the following nine topic areas:

- The consequences of generalist versus specialist care on the costs of care and medical outcomes.
- The market dynamics of the utilization of various forms of labor resources in the health care sector.
- Possible public and private actions to be taken to limit the number of specialists.
- Determinants of patient preferences for generalist versus specialist care.
- Determinants of residency choice.
- Factors that influence the job satisfaction of generalist physicians.
- Factors that affect the choice of generalists to practice in underserved areas.
- The relative impact of changes in medical school admission processes, medical training environments, and practice entry incentives on the supply and distribution of generalist physicians.
- The impact of changes in the organization of health care on the demand and need for generalists.

Projects in topic areas five through eight were aimed at assessing the effectiveness of the three RWJF national programs aimed at changing the mix and distribution of generalists and specialists.

Some of the projects used demonstration sites funded by RWJF through the other three initiatives as places to collect comparative data for their studies.

THE PROGRAM

RWJF decided to organize the *Generalist Provider Research Initiative* as an internally managed program with a senior RWJF program officer, Beth Stevens, Ph.D., serving in the role of national program director (Stevens is now a consultant on the West Coast).

An internal committee composed of RWJF staff advised the program officer on the:

- Research agenda.
- Selection of projects to fund.
- Quality control for the program.

Proposals entertained under the program were submitted to outside review.

The Planning Phase

Early in the program, RWJF awarded a technical assistance grant to the University of Wisconsin-Madison School of Medicine (ID# 022345) to support a series of technical assistance activities related to the development of the *Generalist Provider Research Initiative*.

That technical assistance was required only during the early phases of the program. Once the research projects got under way, RWJF managed the program internally, without outside assistance.

Six major tasks were carried out under the technical assistance grant.

- Conducting literature reviews for individual issue areas to assist RWJF in:
  - Evaluating the strengths and weaknesses of past and recent research in terms of present policy implications.
  - Determining the needs for further research.
- Recommending various options on specific research issues and on approaches to each issue area.
- Working with RWJF staff to develop requests for proposals once the basic research questions and approaches had been established for each issue.
- Recommending ways to identify the most appropriate investigators for each issue area either directly or through a competitive process.
- Carrying out initial reviews of grant proposals and providing guidance and/or assistance in the shaping of the final research designs.
- Monitoring funded projects.

The Implementation Phase

The *Generalist Provider Research Initiative* funded 12 projects—some of them as solicited projects and others by means of competitive calls for proposals. RWJF directed the character of the questions to be addressed.

RWJF staff also worked to attract young and promising researchers to the program's areas of inquiry. Those efforts included obtaining recommendations from established scholars and publicizing the program at academic and professional meetings.

Awards ranged from $7,000 (for a short feasibility study) to more than $750,000 (for a three-year study).

The program's original design called for the convening of a conference of experts at which findings and policy recommendations would be synthesized, extended, and disseminated through invited media. RWJF staff did not hold such a concluding event, however.

By the time the program ended, physician workforce issues had been replaced at the top of the agenda of the health care policy community by other, more pressing issues, such as reform of the health care system and the emergence of managed care.

Communications

Timothy Bell and Company, a communications firm based in Reston, Va., received a program-related grant for the development of a monograph on communication issues related to the program.

The monograph contained a series of general recommendations and strategies such as appropriate target audiences for dissemination efforts. See the Program Results Report on ID# PC378 for details.

No overall communication initiative was implemented but individual research projects applied the recommendation strategies from the monograph in a variety of ways.

For example, in addition to publishing the results of their research in refereed journals—including the *Journal of the American Medical Association,* the *Journal of Rural Health,* and the *Journal of Health and Social Behavior*—many of the researchers made presentations to and conducted seminars for professional, scholarly, policy, and general interest groups.

A number of study reports were featured in newspapers such as the *New York Times,* the *Boston Globe,* and the *Washington Post* as well as on National Public Radio.

OVERALL PROGRAM RESULTS

While most of the projects tended to fall into more than one of the research areas, all had a primary focus on one of the areas. In all, seven of the areas served as the primary focus for at least one project. They were:

- **Topic area 1: The consequences of generalist versus specialist care on the costs of care and medical outcomes.**
  - *Feasibility and Utility of Future Research on the Generalist/Specialist Mix* (Roger A. Rosenblatt, M.D., M.P.H.), Grant ID# PC389.
  - *Research to Compare Practice Styles of Generalists and Specialists* (Dartmouth Medical School), Grant ID# 022305.
  - *Study of the Generalist Role of Medical Specialists and Its Impact on Patients* (University of Washington School of Medicine), Grant ID# 026061.
- **Topic area 2: The market dynamics of the utilization of various forms of labor resources in the health care sector.**
  - *Integration of Mid-Level Practitioners into Acute Care Hospitals* (University of Pittsburgh School of Nursing), Grant ID# 023213.
- **Although no project fell directly into topic area 3 (possible public and private actions to be taken to limit the number of specialists), the following projects addressed issues relevant to it.**
  - *Study of the Generalist Role of Medical Specialists and Its Impact on Patients* (University of Washington School of Medicine), Grant ID# 026061.
  - *Research on the Effectiveness of Health Policy Options in Rural Health Care* (University of North Carolina at Chapel Hill), Grant ID# 026305.
  - *State-by-State Analysis of Mandates to Medical Schools to Produce Primary Care Physicians* (Michigan State University), Grant ID# 026562.
  - *Study of the Impact of Differing Managed Care Models on the Use of Generalist and Specialist Physicians* (Johns Hopkins University School of Hygiene and Public Health), Grant ID# 028373.
- **Similarly, although no project specifically addressed topic area 4 (determinants of patient preferences for generalist versus specialist care), the following projects addressed issues relevant to it.**
  - *Research to Compare Practice Styles of Generalists and Specialists* (Dartmouth Medical School), Grant ID# 022305.
  - *Study of the Generalist Role of Medical Specialists and Its Impact on Patients* (University of Washington School of Medicine), Grant ID# 026061.

- **Topic area 5: Determinants of residency choice.**
  - *Study of General versus Subspecialty Career Paths in Internal Medicine* (Oregon Health Sciences Foundation), Grant ID# 022385.
  - *Preparation of Papers for National Studies of the Internal Medicine Workforce* (University of Chicago Center for Health Administration Studies), Grant ID# 023845.
- **Topic area 6: Factors that influence the job satisfaction of generalist physicians.**
  - *Study of Career Satisfaction among Practicing Physicians* (Society of General Internal Medicine), Grant ID# 027069.
- **Topic area 7: Factors that affect the choice of generalists to practice in underserved areas.**
  - *Research on the Contribution of International Medical Graduates to New York's Health Care Delivery System* (Health Research, Inc.), Grant ID# 029918.
  - *Research on the Effectiveness of Health Policy Options in Rural Health Care* (University of North Carolina at Chapel Hill), Grant ID# 026305.
- **Topic area 8: The relative impact of changes in medical school admission processes, medical training environments, and practice entry incentives on the supply and distribution of generalist physicians.**
  - *State-by-State Analysis of Mandates to Medical Schools to Produce Primary Care Physicians* (Michigan State University), Grant ID# 026562.
  - *Surveys of Attitudes and Choices in Medical Education and Training* (Harvard Pilgrim Health Care, Inc.), Grant ID#s 020091, 021608, 027581, 029699. Only one of those grants—ID# 027581—was funded under this program, but findings from all of the surveys are reported here.
- **Topic area 9: The impact of changes in the organization of health care on the demand and need for generalists.**
  - *Study of the Impact of Differing Managed Care Models on the Use of Generalist and Specialist Physicians* (Johns Hopkins University School of Hygiene and Public Health), Grant ID# 028373.

LESSONS LEARNED

At the time, the *Generalist Provider Research Initiative* represented a relatively new approach to research and evaluation for RWJF.

For example, rather than issuing calls for proposals on specific research topics, RWJF chose to solicit proposals from selected scholars already conducting research in topic areas relevant to the program.

RWJF encouraged researchers to develop projects both in new areas of inquiry and as extensions of existing research. Staff actively sought and supported younger, less established researchers with potential.

The program was also internally managed with a very light management structure. Following are some of the key lessons RWJF learned from the *Generalist Provider Research Initiative* experience.

1. **A proactive approach to research can be very effective.** In actively working to identify topics of interest and researchers of promise, RWJF was able to direct support to new groups of scholars, innovative topics, new areas of investigation and, ultimately, interesting research products.
2. **A light, relatively unstructured program management approach can increase flexibility and diversity in project selection and allow for more innovation and risk taking in funding decisions.**
3. **A light management structure may make synthesis of various research projects difficult.** The task of fitting a set of very diverse projects into a coherent, focused model is nearly impossible without more management resources.
4. **The light structure of the program may make it difficult to maintain the program's momentum and may lead to declining interest within the research community.**
5. **The lack of an organized program-wide dissemination strategy may have reduced the impact of the research.** However, several individual projects did achieve high levels of exposure in health policy circles and/or the mass media.

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Program Officers: Beth A. Stevens and Susan B. Hassmiller

APPENDIX

Outside Experts at the Agenda-Setting Meetings, November 1992

(Current as of the time of the grant; provided by the grantee organization; not verified by RWJF.)

(affiliations as of November 1992)

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PROJECT LIST

Reports on the projects managed under this National Program are listed below. Click on a project's title to see the complete report, which typically includes a summary, description of the project's objectives, its results or findings, post grant activities and a list of key products.

Program-Related Grant

- Communications Plan Developed to Focus on the Need for More Generalists (Grant ID# PC378, July 2002)

Topic area 1: The consequences of generalist versus specialist care on the costs of care and medical outcomes

- Comparing Generalists vs. Specialists Shows No Difference in Practice Style (Grant ID# 22305, July 2002)
- Evaluation of Existing Research Shows the Need for More Studies on the Generalist/Specialist Mix (Grant ID# PC389, July 2002)
- Role Reversal: When the Specialist Plays General Practitioner (Grant ID# 26061, July 2002)

Topic area 2: The market dynamics of the utilization of various forms of labor resources in the health care sector

- Nurse Practitioners and Physicians Assistants Handle Same Acute Care Activities as Doctors (Grant ID# 23213, July 2002)

Topic area 5: Determinants of residency choice

- Generalists or Specialists? Women, Older Students and Married Students Choose to Be Generalists (Grant ID# 22385, July 2002)
- Internal Medicine Shifts Toward Primary Care (Grant ID# 23845, July 2002)

Topic area 6: Factors that influence the job satisfaction of generalist physicians

- Time Pressures Leave Doctors Dissatisfied (Grant ID# 27069, April 2008)

Topic area 7: Factors that affect the choice of generalists to practice in underserved areas

- International Medical Graduates Contribute Significantly to New York's Health Care System (Grant ID# 29918, July 2002)
- More Doctors Not Only Key to Improving Primary Care in Rural America (Grant ID# 26305, July 2002)

Topic area 8:The relative impact of changes in medical school admission processes, medical training environments, and practice entry incentives on the supply and distribution of generalist physicians

- How States Mandate the Need for Primary Care Physicians (Grant ID# 26562, July 2002)

Topic area 8: The relative impact of changes in medical school admission processes, medical training environments, and practice entry incentives on the supply and distribution of generalist physicians

- Mid 1990s Surveys Measure Attitudes Toward Primary Care in the Medical Professions—An Issue of Importance to RWJF (Grant ID# 29699, etc., July 2002)

Topic area 9: The impact of changes in the organization of health care on the demand and need for generalists

- Is There a Specialist in the House? Most People Don't Ask the Question (Grant ID# 28373, July 2002)