

# FROM WASHINGTON

## Primary Care Research: Current Challenges, Future Needs

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In 1990 the Agency for Health Care Policy and Research (AHCPR) established the first federal entity whose sole focus was enhancing the knowledge base for primary care practice and policy. Initial efforts focused on convening the multiple communities of researchers who contribute to primary care research (family medicine, internal medicine, pediatrics, nursing, social scientists, and others) to encourage cross-disciplinary collaboration and expansion of the pool of researchers. Specific activities supported by AHCPR included several large conferences, a task force on "Building Capacity for Research in Primary Care," the provision of technical assistance to prospective applicants, and the hosting of several visiting Senior Scholars in residence. In 1995, the original AHCPR Division of Primary Care was upgraded to the Center for Primary Care Research, resulting in both greater visibility for the discipline and increased influence on agency funding decisions. During that year, AHCPR supported primary care-related research projects totaling approximately \$20 million.

### AHCPR and the 104th Congress

The unbridled support and upward trajectory of funding for AHCPR was abruptly halted, however, in late 1995. The active role AHCPR took in President Clinton's failed effort to enact health care reform made it a particular target for budget cutters in the Congress that came to power following the elections of 1994. Efforts to eliminate all funding for the agency were ultimately unsuccessful, but the AHCPR fiscal year 1996 budget

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was nevertheless significantly reduced. Despite strong support from multiple professional organizations such as the American Academy of Family Physicians, subsequent budgetary allocations for AHCPR have yet to match the 1995 fiscal year level.

The agency's "near-death" experience has stimulated intense self-scrutiny as well as a reevaluation of the appropriate role of the agency in an era of increasing privatization and devolution. One notable result has been the curtailment of the agency's widely publicized support of the development of clinical practice guidelines. And while being challenged to demonstrate the value of the research previously supported (ie, how has it influenced practice or policy?), AHCPR is also being forced by recent budgetary reductions to make difficult choices on how best to focus its limited resources for the support of future research.

### Primary Care and Changes in the Health Care System

Despite, or as a result of, Congress's failure to pass a comprehensive health care reform bill, the US health care system has continued to evolve substantially. Traditional fee-for-service medicine is rapidly being replaced in the United States by a system driven by organized health care plans that compete for their share of the health care market largely on the basis of cost. Managed care organizations (MCOs) now provide care to a majority of Americans, and the trend toward managed care in both private and public health insurance continues to accelerate.

As the system has evolved, primary care has become both more relevant and more complex. As a result of cost-containment efforts, the center of the clinical universe has shifted from the hospital to the ambulatory setting. This change has sparked increasing interest among MCOs in knowing how to provide primary care services in

the most efficient and effective manner. The financial safeguards imposed by the majority of health plans, however, such as utilization review, requirements for precertification, capitated contracts, and withholding of a percentage of provider income against potential deficits, have greatly complicated medical practice. The recent move of a majority of primary care physicians away from solo practice and toward groups of doctors, institutions, or both<sup>1</sup> appears to be clearly related to the increasing complexity of practice management.

At the same time, widespread efforts by MCOs to reduce the cost of health care services have created public concern that quality of care is being jeopardized. In particular, organized purchasers of health care services, such as employers, unions, and consumer cooperatives, have called for measures of the quality and organizational performance of prospective health care plans as well as information about individual practitioners' performance. The most visible result of this interest has been the emergence of reporting systems that compare health care plans and providers. Several such report cards incorporate quality measures specifically relevant to primary care, including the evaluation of medical services provided to patients with acute and chronic illnesses.<sup>2,3</sup>

### Primary Care and Health Services Research

As the US health care system changes, the type of research that is relevant to practice and policy is also changing. In March 1990, AHCPR supported a conference entitled "Primary Care Research: An Agenda for the 90s." Many of the policymakers, researchers, and practitioners who attended the conference shared the opinion that clinical studies (focusing, for example, on the natural history of illnesses and outcomes of treatment plans) were the backbone of primary care research. While health services research was often mentioned during the conference, it was acknowledged that "the association of primary care research with health services research has not been an easy or natural process."<sup>4</sup>

Given the corporatization and other health care system changes that have occurred in the ensuing 7 years, however, the study of primary

care can no longer ignore health services research. Clinical studies that ignore the context of practice are likely, at best, to be of questionable interest or use to medical directors and other policymakers within health care plans. At worst, the findings of such studies may be misleading.

The designs of most clinical studies in primary care will therefore need to include consideration of the organization, planning, financing, and administration as well as the outcomes of health services. While there is little doubt that enthusiasm for outcomes research—in particular, clinical trials and other studies that identify the most effective methods for preventing, diagnosing, treating, and managing common health conditions—will continue to increase, the strong preference will be for studies whose results are directly applicable to real-world settings. The costs as well as the effectiveness of primary care practices will become increasingly important outcome measures.

### Quality Measurement in Primary Care

The national trend toward quality measurement of health care will add significantly to the research agenda in primary care. Before systems to monitor the performance of health plans and individual primary care practitioners are finally instituted, studies are needed to inform strategies for assessing and improving the quality of primary care delivery in a fair and accurate manner.

Research has been proposed that would relate the effectiveness of primary care delivery to the subsequent utilization of health care services.<sup>5</sup> Yet the extent to which outcomes such as avoidable hospitalizations or visits to the emergency department represent an actual failure of primary care delivery, and, if so, how to fix it, is still unknown. Little is also known about which specific processes of care, such as provider communication skills and continuity of care, are most critical to the provision of quality primary care services. How should these processes be defined and measured? How can their effect on patient outcomes be assessed? How can they be translated into performance measures or other strategies for quality improvement? Ensuring that quality measures are sufficiently detailed and appropriately adjusted for case mix and severity of illness

will be an ongoing challenge for primary care researchers.<sup>6</sup>

### Research on Patient Preferences

Studies of clinical decision-making have long been considered an important part of primary care research, and enthusiasm for this type of research is unlikely to be altered by changes in the health care system. Future studies, however, will require an even greater emphasis on patient preferences and the involvement of patients in the decision-making process.

The push for research in this area will be fueled by two forces: (1) market-driven concerns among MCOs about consumer satisfaction; and (2) the explosion of health-related information available through the media and over the Internet to both providers and patients. Consumers are becoming increasingly aware, for example, of the availability of testing for genetic susceptibility to various conditions.<sup>7</sup> Research is needed to define optimal strategies by which the primary care provider can assess a patient's risk for both common and rare genetically influenced conditions and communicate individualized data to the patient at the time decisions about testing are being made.

### Studies of Provider Competence

Overlapping the need for quality measurement will be the need to define the knowledge, skills, and competencies of providers required to ensure the best outcomes for primary care patients. Largely in response to restrictions imposed by some MCOs on direct patient access to specialty care, several studies have been conducted that attempt to quantify differences in the quality of care provided by primary care clinicians vs selected subspecialists. To date, the cumulative results have been mixed. An analysis of the Medical Outcomes Study indicated no significant differences in the outcomes of patients with hypertension or diabetes mellitus cared for by specialists vs those cared for by generalists, although specialists were found to use more resources and generate higher costs.<sup>8,9</sup> Another study compared outcomes of patients with acute stroke who received in-hospital neurology specialty services vs those cared for by generalists.<sup>10</sup> A third looked at mortality among Medicare

patients hospitalized for acute myocardial infarction by cardiologists vs primary care physicians.<sup>11</sup>

Each of these studies may be criticized on one or more of the following counts: (1) selection bias, ie, the tendency of patients with differing characteristics to be drawn to different kinds of medical practices; (2) uncertainty about the extent to which differences in patient outcomes are related to the type of medical professional in charge of the care, as opposed to the system of services in which that care occurs and the interactions between the professional and the system; and (3) questionable generalizability of the data, given the wide array of modern practice settings.

Beyond the concerns over methodological issues, however, is the more important question of whether such research serves any useful purpose. Even if one accepts the conclusion that cardiologists as a group have greater knowledge and skills in the care of patients with acute myocardial infarction (a conclusion that, if found incorrect, would cast serious doubt on the value of fellowship training!), it does not automatically follow that the professional credentials of the admitting clinician are the only, or the most reliable, predictor or correlator of outcomes. Studies designed to identify the specific provider practices associated with better post-MI outcomes would be far more useful. Such practices might include continuity and coordination of care as well as use of cardiac procedures, thrombolytic agents, and beta-blockers. Instead of escalating turf wars, these studies might evaluate the trade-offs of different configurations of practitioners and inform the more crucial issue of how teams of available clinicians (including providers of primary, specialty, and ancillary services) need to interact to assure optimal, coordinated, and cost-effective care.<sup>12</sup>

### The Infrastructure of Primary Care Research

Changes in primary care within the evolving health care system bring with them a new set of challenges for the emerging enterprise of primary care research. In order for research to serve the rapidly changing needs of primary care practice and policy, there will be an even more pressing need for sustainable infrastructures that link practitioners and researchers in an effective fashion.

ion. To ensure generalizable results, primary care research will often need to involve multiple practices or clinical sites. Practice-based research networks<sup>13</sup> will continue to be one means of linking primary care researchers to multiple practice sites, although such networks currently face significant challenges in terms of financial viability. Network-type managed care organizations, such as independent practice associations (IPAs) and preferred provider organizations (PPOs) (within which the greatest recent increases in managed care enrollment have occurred) potentially offer another representative primary care research base. An idea that also deserves attention is the possibility of establishing various types of practice laboratories, or centers of excellence, in primary care across the country. Such laboratories might involve community practices, managed care organizations, and academic medical centers. The challenge will be to forge sustainable partnerships and identify sufficient resources to guarantee their success.

Another challenge for primary care researchers is the amount of time (typically years) required to move from conceptualization to published results. Given the rapid pace of changes within the health care system, there is no guarantee that a primary care services-related research question that seemed important several years ago will have the same clinical relevance when the study results finally become available. Linking researchers to clinicians through "virtual" practice networks may become possible, however, as soon as information generated and accessed at the point of care can be collected into a central database, while maintaining the confidentiality of individual patient data. Such systems would allow researchers to capture essential and timely information about the content of primary care without disrupting practice. Obvious barriers to overcome include the current rarity of computerized patient records and the lack of a widely accepted coding system in the United States that matches the reason for a visit with the more standard diagnostic coding.

### **Future Funding for Primary Care Research**

Perhaps the most significant barrier facing primary care research continues to be the mismatch

between resources and opportunities for research. The budget proposed to Congress by the President for AHCPR in fiscal year 1998 includes slightly more than \$5 million more for research than the amount approved for the current fiscal year. Congressional response to the President's proposal cannot be predicted. Given the plethora of research issues to be addressed in primary care, however, as well as in other areas important to AHCPR, it is becoming increasingly clear that AHCPR alone cannot possibly support needed work in all areas.

Addressing the current resource needs of primary care research will require the following action:

1. In light of limited budgets, funding priority needs to be given to primary care research applications with the greatest potential to have a direct effect on health care policy or the actual practice of primary care or both. The potential relevance of results to current health care plans, including the impact of interventions on the costs and effectiveness of health care services, will become even more important as funding decisions are made.

2. Efforts must continue to demonstrate and communicate to both federal and nonfederal funding sources the value of primary care research. The results of published work that support the impact of research on primary care practice and policy, as well as its contribution to the knowledge base, need to be widely disseminated to selected target audiences.

3. MCOs need to be engaged at least in the development of primary care research infrastructures if not in the direct financial support of research projects. One concrete means of support would be to assist providers in the purchase and maintenance of computer equipment that can be used for data collection and dissemination. There is a clear overlap between the interest of the primary care research community and the accelerating efforts of MCOs to refine and test measures of quality in primary care. Decision makers within MCOs need to be persuaded of the convergence of organizational or administrative needs and the needs of primary care data collection. A collective investment in methods of data collection for both research and quality improvement could ultimately serve the interests of all Americans in receiving evidence-based, high-quality primary care.

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