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Partnerships For Research Among Managed Care Organizations

Managed care plans that once competed fiercely for market share now find themselves sharing key research findings with those competitors—to the benefit of consumers.

BY MARY L. DURHAM

ABSTRACT: Researchers within health maintenance organizations (HMOs) need to create greater opportunities for collaborative research within their organizations. Multisite research will yield high-quality information for improving care. This paper describes situations in which competition as well as collaboration are possible across HMOs in the current environment. The paper considers the following questions: (1) What criteria determine if a project can be conducted as a multisite study; and (2) what population and organizational features should be considered when designing cross-site collaboration? The paper also discusses two important trends in the larger health care environment: cost containment, which is both a challenge and an opportunity for health services researchers working within managed care; and mergers and acquisitions, which are changing the face of the larger health care industry.

RAPID AND DRAMATIC CHANGE in the health care industry has opened new doors and created expanded opportunities for health services research. Population-based medicine and evidence-based practice have created an unparalleled need for information; quality improvement and performance management have pushed the limits of methodological expertise, thereby increasing the demand for new techniques and measurement approaches. It is difficult to argue against the need for more health services research.

With demand for empirical information and solid scientific information at an all-time high, we often lack even the most simple data describing the health care system and its individual components. Administrative data systems are difficult to use for research pur-

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poses and have many limitations in scope, breadth, and quality. Clinical information systems are still quite rare. When such systems exist, they often are unable to produce meaningful data for clinical planning or research purposes. Even large, integrated health care systems such as Kaiser Permanente have not created national databases that can be mined by researchers or other analysts.

Without a national database (and the likely absence of such a system for quite a long time), health services researchers must conduct more multisite studies and undertake the difficult work of merging divergent data sets into usable formats for research. This will require us to shift from a mostly competitive model of research to a more collaborative one. It also will require the building of partnerships among researchers inside managed care organizations (MCOs) so that findings regarding improvements in patients’ health outcomes and the delivery of health care obtained by private organizations can be brought into the public domain.

From Competition To Collaboration

For centuries scientists have carried out research as lone scholars. They have worked in libraries and laboratories, searching for novel ideas while at the same time competing with other scholars for breakthroughs in science. Scientific findings are constantly judged through a rigorous peer-review process. Grant funding is highly competitive because dollars are scarce and decisions about funding awards rely on the same peer-review process. In a very direct way, the success of one scientist may mean reduced access to research dollars for another.

In recent years the competitive research model has been magnified further by the proliferation of biotechnology firms and pharmaceutical companies whose profits are derived from high-stakes research and development (R&D). The competitive edge for these enterprises depends on R&D investments that get new products to market before their competitors do. Research is conducted behind locked doors, and competition is fierce among scientists both inside and out of the companies.

Health services researchers often hold or create information that is proprietary in nature because their research questions focus on key issues in a highly competitive industry: health care costs, quality, access, and patient satisfaction. This may be especially true for the growing number of health services researchers who work outside academe in organizations such as Harvard Pilgrim Health Care, Kaiser Permanente, Group Health Cooperative of Puget Sound, Prudential, or United Healthcare. Even when those researchers publish results in the public domain, their findings may be used for proprie-
“Despite intense competition among researchers, most health services researchers have adopted a cooperative spirit with their colleagues.”

itary purposes. For example, cost-effective smoking cessation programs, methods to measure functional status, sophisticated breast cancer screening programs, guidelines for the use of lipid-lowering drugs, immunization tracking systems, or risk-adjustment methods developed and described in the public domain may become a core business product or strategy for virtually any health care organization. An organization’s willingness to share that information with competitors varies widely in the health care industry.

In more and more instances, the host health care organizations that employ researchers share the same competitive marketplace. This may complicate the ability to cooperate through common protocols or shared data. Analysis of important outcomes such as costs may require scrutiny of proprietary information, which companies do not want their competitors (including the competitor’s research staff) to see.

Despite intense competition among researchers, most health services researchers have adopted a cooperative spirit with their colleagues. Interdisciplinary teams are required to understand the biomedical, social, psychological, and economic aspects of virtually all health care issues. Cooperation with clinicians in a delivery system is necessary before research begins because researchers themselves are guests in someone else’s clinical domain.

Additional factors have emerged more recently, which favor collaboration over competition among health services researchers. First, the U.S. population is becoming more diverse. Studies conducted with predominantly white male subjects provide inadequate information about how to improve the health and well-being of women and members of minority groups. Urged by requirements of the National Institutes of Health (NIH) to include minorities and women in funded studies, researchers are beginning to realize that the goal of improving the health status of the community can only be achieved if treatment approaches and system innovation reflect knowledge about a broader segment of the population.

Second, studies comparing various models of care are urgently needed. The widespread growth of managed care requires us to turn our attention to differences in outcomes among a variety of capitated models of care. This creates a need for—and perhaps requires—researchers to develop networks of colleagues within a variety of types of settings. Key comparisons on cost, quality, and other critical out-
comes will be impossible without these cross-system connections.

Third, policymakers are turning to health services researchers to develop quality and performance measures. Competitive or proprietary approaches to measurement or uninformed approaches to quality measurement will lead to the proliferation of “orphan” measures (used in a single site) and thus to nonstandardized comparisons of patients’ health outcomes and delivery systems. The ultimate test of researchers’ ability to cooperate may be our willingness to develop and disseminate approaches to outcomes measurement that can be understood and implemented in the real world. This will require pointing out the limitations of our current knowledge as well as creating new information.

Finally, health services researchers need to develop and share expertise about how to create organizational change. We need to understand the limitations of health services and clinical research conducted elsewhere and adapt promising interventions to new environments. We need to assess the social and organizational context in which successful interventions take place and recreate (or locate) circumstances in which innovations can succeed. We need to help one another become experts in the area of organizational change. In the near future, understanding and applying the levers of change may signify the difference between conducting academic research and changing the delivery of health care through applied research. Without extensive cooperation in this enterprise, the best and most efficacious interventions and program designs may be doomed to failure.

**Conducting Successful Cross-Site Research: Advice From The HMO Research Network**

The HMO Research Network is a confederation of research organizations located within twelve integrated health care organizations. The mission of the network is “to encourage high quality, public domain research involving health maintenance organizations by enhancing the research capabilities of individual HMOs, fostering collaborative research, and influencing that national research agenda.” The network provides a mechanism for sharing public-domain research findings and a platform for collaborative multisite research.

The most common form of research conducted by members of the network is still the single-site project funded through a highly competitive peer-review process. Therefore, members of the HMO Research Network compete against one another for funding from traditional sources such as the U.S. Food and Drug Administration (FDA) and the NIH. This competitive practice can and should be encouraged as a major form of support for public-domain research.
Clearly, not all research can or should be conducted in multiple sites. But when having more than one site provides an advantage for research, a number of factors can improve the chance of its success. In June 1996 participants in the HMO Research Network’s annual conference in Minneapolis identified and discussed two key questions: (1) What criteria should be used to determine if a project can be conducted as a multisite study? (2) What population and organizational features should be considered when designing cross-site collaboration?

These questions take into account the logistical, financial, and political barriers associated with collaborative studies. The recommendations are based on years of experience with competitive and collaborative work within HMO settings. A complete accounting of all studies conducted within managed care does not currently exist. However, examples of collaborative studies within managed care are provided in the following discussion.

**Criteria For Multisite Studies**

Successful multisite studies require commitment; communication and trust; and attention to logistics.

- **Commitment.** Health services researchers are guests in their own research laboratory; therefore, they are even less welcome in the clinical settings of their competitors. Virtually all health services researchers must win the approval of clinical colleagues to conduct patient-based research (as opposed to secondary data analysis); only after those agreements are reached are they likely to seek approval of the institutional review board (IRB) and other oversight bodies.

  Members of the HMO Research Network considered making contact with clinicians or researchers in other sites after submitting research proposals, with the intent of recruiting “sites” for a study, as a poor example of truly collaborative research. Common protocols, such as the Cooperative Breast Cancer Tissue Registry (sponsored by the National Cancer Institute) or the Southwest Oncology Group, are important mechanisms for increasing scientific knowledge, but they minimize scientific input and collaboration on the part of clinicians and researchers at the “site.” Implementation of a standard protocol is appropriate for some studies (such as clinical trials), but failure to include local clinicians and researchers in the design of a project should be the exception rather than the rule in health services research.

  Real collaboration occurs when ideas and responsibilities of multiple parties are joined into a unified product for which all team members share responsibility. For example, a protocol for a randomized clinical trial might be developed jointly by scientists at multiple
sites and then implemented using a unified methodological or conceptual framework. Rather than merely identifying sites that are willing to implement a protocol, scientists involved in collaborative research approach each other as partners in the development and implementation of the protocol and the publication of results.

Once designed, the collaborative research project requires a lead principal investigator (PI) who directs the overall project and a PI at each site. Each local PI is an integral part of the study team. The local PI must participate in the conceptual development and planning of the protocol and be a full scientific colleague in the analysis and dissemination of the research results. The local PI is critical to the success of multisite research. He or she must serve as an on-site champion, while encouraging and developing top-level support for the project.

In a recent risk-adjustment project, Mark Hornbrook and Michael Goodman set up a fully collaborative, multisite research team by approaching researchers at HealthPartners, Group Health Cooperative of Puget Sound, and Kaiser Permanente’s Northwest and Rocky Mountain divisions well before the research project was submitted or funded. The lead PI (Hornbrook) found a local PI at each site, each of whom was written into the budget for the project and used as a full collaborator on every aspect of the study.

■ Communication and trust. Collaboration requires constant, high-quality communication with the entire research team. Collaborators should develop a communication plan that includes agreements about frequency and content of their scientific exchange, individual responsibilities, project logistics, time lines, and milestones.

Working with others—especially at a distance—requires flexibility and clear recognition of individual work styles. HMO Research Network members warned that extremely different work styles can be hazardous to collaborative projects. Explicit communication plans that recognize work style and communication differences will reduce the likelihood of clashes among individual investigators.

It is also essential to understand the career interests and motivations of collaborators from the beginning of a project. Is an individual collaborator motivated by the prospect of paper publication, career development, release time from clinical work, or, increased quality of clinical data? It may be possible to serve multiple purposes within a single project; however, if a collaborator is unable to accomplish his or her own personal objectives through the project, motivation for the work may flag, and deadlines may not be met.

■ Logistics. Collaboration always benefits from a solid research infrastructure in each site. Sufficient management staff should be on
hand to hire and supervise research personnel. This requires sufficient funding to support a multisite project. The need to obtain adequate funding is becoming even more essential because clinical budgets can rarely bear the additional burden of unfunded research time. A preliminary assessment of the logistical hurdles of a collaborative study should be conducted before the proposal is submitted.

**Population And Organizational Features**

Comparing populations across a variety of organizational features such as those represented by the HMO Research Network creates acknowledged strengths in the differences as well as the similarities of their organizations. For example, it is possible to compare and contrast health and functional status across an array of organizational designs and financing arrangements. Practice variations may be found within a single organization and across different models of care. Health services researchers need to pursue important questions that arise from geographical variation and population diversity. Careful examination of each of these factors requires multisite research and carefully nurtured collaboration among health services researchers.

Collaboration with and among health services researchers in HMOs will allow the study of rare outcomes and characterize a major segment of the managed care population. Major contributions to epidemiology have already resulted from research in managed care. Development of larger, more expansive data sets will only increase the likelihood of major findings in virtually every area of epidemiology. Perhaps one of the most promising areas of collaboration in health services research comes from the arrival of large-scale data warehouses and other networks.

**Building An Integrated Data System:**

**The Data Warehouse**

Most of the needs and opportunities for enhanced collaboration depend on the availability of data. Primary data may be collected at multiple sites for a clinical trial, or clinical information systems and other automated data sources may be required for multisite analyses. Collection of primary clinical data at multiple sites is therefore more common than collection of multisite data. Clearly, there are significant structural barriers to secondary data analysis that overshadow the logistics of the most complicated clinical trial.

If scientists are to conduct important epidemiologic, clinical, and health services research, they will need to develop computerized databases that allow comparisons across delivery systems. The com-
plexity of this task is currently holding back important developments in health services research in managed care.

Much of the secondary data for research within MCOs comes from administrative and clinical databases maintained by local systems of groups such as Harvard Pilgrim, Group Health Cooperative, Kaiser Permanente, Prudential, and United Healthcare. Researchers within these organizations have become expert in managing, reshaping, and transforming data from unwieldy administrative files into research-quality databases. The scale and sophistication of those databases vary greatly across health care organizations. In large health care systems such as Kaiser Permanente, individual regions or divisions may maintain their own unique data systems, thus compounding the problem of comparability and overlap.

Researchers need to support, encourage, and advise the development of data warehouses within and across organizations. This is a first, basic step toward creating access to nationwide data on cost, demographics, eligibility, morbidity, utilization, and health status. The challenges of creating integrated databases even within organizations are enormous in terms of both cost and logistics. However, if we have only single-system data warehouses, our ability to investigate many of the most important health services research questions of the day will continue to be limited.

Because of our cross-systems focus (and public-domain rather than proprietary interests), researchers may be able to share confidential (unidentified) data across competitive boundaries when parent organizations cannot. This is proving to be challenging but achievable within the HMO Research Network, where studies using data from sometimes competing organizations can be used to address important questions such as risk adjustment or clinical improvement. Organizations such as the HMO Research Network may ultimately provide a platform for establishing an integrated data warehouse, built off a common architecture developed by research partners. In doing so, collaborators have to grapple with the difficult issues of data access, including the proprietary nature of data among otherwise “collaborative” teams of researchers.

**Next Steps: Where Is Health Care Taking Research?**

Trends in the larger health care environment are exerting powerful pressures on the health services research community. Those pressures go beyond the usual expectation that we must produce high-quality, timely information for consumers, policymakers, and our own scientific peers. Health services researchers who work within managed care are being influenced by two additional trends in the health care environment: cost containment, and mergers and con-
solidation in the health care market.

- **Cost containment.** HMOs have always considered cost containment as one of their major objectives. Many HMOs also have considered experimentation and innovation as a business imperative and social responsibility. These two forces allowed the entry and growth of health services research within pioneering HMOs such as Kaiser Permanente, Group Health Cooperative of Puget Sound, and Harvard Community Health Plan (later Harvard Pilgrim). With a small core budget from the parent organization, a few research centers grew into thriving enterprises. The ones that survived obtained the vast majority of their research funds from external sources such as the NIH, the Agency for Health Care Policy and Research (AHCPR), the Centers for Disease Control and Prevention (CDC), other federal agencies, private foundations, and industry.

  Research was always conducted in partnership with the parent organization. Clinical trials or program development and evaluations were conducted within the local “laboratory”—the HMO. Cooperation and collaboration with clinicians who were providing “usual care” or actively participating in the trials or experiments were the rule of the day.

  As the industry developed, experimented, and improved itself, managed care slowly gained market share. In 1988 about 30 percent of insured workers had some type of managed care coverage; the remaining 70 percent had coverage based on fee-for-service payment. By 1995 those figures were reversed: Fee-for-service was disappearing as an employer-sponsored option (30 percent of insured workers), and 149 million Americans received their health care from some form of managed care plan.

  For researchers based in HMOs, marketplace developments have magnified the sensitivities and pressures of conducting research in a highly cost-conscious environment. But the demands placed on providers who collaborate with researchers have changed the most. Same-day appointment scheduling, higher productivity, and constant monitoring of quality and patient satisfaction standards have resulted in less time and energy for extraneous attempts at innovation and change. In a very real sense, providers are consumed with the innovations and change that are required by the system and less able to contemplate the additional efforts inherent in experimentation.

  Sponsors of clinical trials also are concerned about the impact of
managed care on funding for research. Universities and HMOs have traditionally covered many of the costs of clinical trials. Universities have done so via generous revenue for fee-for-service care (including Medicare and Medicare reimbursement). MCOs have paid for extra days of hospital care, drugs, or other direct patient care expenses in order to test new drug treatment or experimental procedures.

In a highly competitive marketplace in which every dollar counts, universities and MCOs are less able to subsidize clinical research, despite its potential benefits for patients. The NIH as well as numerous clinical advocacy groups (such as the Society for the Advancement of Women’s Health Research) have raised their voices about how to save clinical research from extinction in the health care environment of the twenty-first century.

However, more and more MCOs—including a number of large, for-profit systems like Prudential and United Healthcare—recognize the value of health services research for containing costs and improving quality and customer satisfaction. R&D is being enhanced and revitalized in organizations that see a strategic advantage to investing in research.

However, a significant hazard is that organizations may feel compelled to support research only when it provides a strategic advantage to the competitive interests of the parent organization. Under such a philosophy, science in the public domain is discouraged, and research findings that otherwise would improve the health of the public are reserved for the strategic purposes of the sponsor.

■ Mergers and acquisitions. Researchers often regard themselves as being beyond the reach of business trends and practices. However, it is increasingly difficult to avoid the impact of the intense competition in health care. This is especially true when researchers work inside health care organizations. Change and confusion are certain when a health services researcher’s “laboratory” becomes involved in a merger or acquisition.

While opportunities for expanding databases and studying new populations abound with many mergers, the biggest threat to research in such an environment is that new buyers may lack a basic understanding of the value of research. Research that is academically oriented and in the public domain may be misunderstood as extraneous to the business of a health care firm; moreover, acquiring companies may believe that the only appropriate function for research is strategic, proprietary R&D. Downsizing (or “rightsizing”) to reduce costs or eliminate duplication of effort also may jeopardize support for researchers.

Research centers that have survived mergers are those whose representatives have argued successfully that research adds value to
the newly configured organization. This message is best received if health services researchers have already created a larger market for research knowledge by sharing research findings with a larger number of key customers. Company executives may choose to maintain or grow research (or strategic R&D) if improvements in health care or competitive advantages are likely to accrue from such an investment. That will require a collaborative effort on the part of virtually all applied researchers to inform the public, policymakers, the scientific community, and, above all, our own organizations of the value that researchers add to the health care field.

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NOTES


4. Hornbrook and Goodman, “Chronic Disease, Functional Health Status, and
Demographics.”
7. Examples abound in the research literature; contact the author for specific references.
8. Hornbrook and Goodman, “Chronic Disease, Functional Health Status, and Demographics.”
13. Ibid.