

UNIVERSITY OF CALIFORNIA, DAVIS
CENTER FOR HEALTH SERVICES RESEARCH
IN PRIMARY CARE

1998-1999 ANNUAL REPORT

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University of California Davis
Center for Health Services Research in Primary Care

FIFTH ANNUAL REPORT

1998-1999

The UCD Center for Health Services Research in Primary Care has now completed four years of continuing growth and development following its initial planning year. During this time, Center efforts have focused on careful building of expertise, experience and relationships within the University and with outside partners during this time. This development has been acknowledged during the past year with approval of the application for Organized Research Unit (ORU) status by each committee within the University charged to review. These approvals reflect a consensual academic validation of the solid organizational and research base that the Center has developed. In this way, the continuing development of research and educational activities is being recognized and acknowledged within the University of California research community. This annual report will provide an overview of the activities reflected in the approval of request for Organized Research Unit status and delineate the accomplishments of this past year.

I. Activities and Accomplishment of Current Year

A. Administrative and Organizational Development

Center Leadership

During this reporting period, Richard L. Kravitz, MD, MSPH, has continued to serve as Center Director. Dr. Kravitz' research expertise and contributions to education and service at the University have been acknowledged in his promotion to the rank of Professor in the Division of General Internal Medicine on July 1, 1999. In the continuing process of research skill development, Dr. Kravitz has begun a sabbatical to work with the New England Health Institute at Tufts University while Edward J. Callahan, PhD, directs the Center on an interim basis. In view of the expanding portfolio of Center activities and in consultation with Center members and the Dean, School of Medicine, Dr. Callahan was appointed as Center Associate Director in July, 1998. Dr. Callahan's primary appointment is Professor of Psychology in the Department of Family and Community Medicine; he is an experienced health services researcher.

New Reporting Relationships

Dr. Kravitz now reports to Allan Siefkin, MD, (Associate Director for Clinical Affairs for UCD Health System) concerning day-to-day administrative affairs and to Kevin Smith, PhD, Vice Chancellor for Research for long-term programmatic affairs. It is not anticipated that these reporting relationships will change further when the Center achieves designation as an Organized Research Unit (ORU).

Remodeling of Center Space

Rapid growth of funded Center research activities and successful faculty recruitment continue to generate new space needs. These needs have been partially accommodated by a remodeling project that created one additional enclosed office and several new cubicles within existing Center space in Suite 2500 of the Patient Support Services Building (PSSB) on the UCDCM campus. At the time of this writing, space remains marginally adequate for Center purposes, but accelerating growth will again mean that Center space will be sorely taxed again soon. Discussion is ongoing with Allan Siefkin, MD, Associate Director for Clinical Affairs, to identify and obtain space adequate for the next several years of Center function.

Computing Resources

Computer needs are reasonably well met by the Center's Hewlett Packard LH Plus server and fourteen Pentium workstations. These computer resources have enhanced communication among Center members and have facilitated numerous Center projects. Because data stored on Center computers is often sensitive and almost always "mission critical," there is a need for meticulous security, backup, and maintenance procedures. The Center uses some of its own core funds to provide regular computer maintenance. Current hard drive space is adequate for Center functions; however, each new version of commonly used software uses more hard drive space. Given the continuing rapid growth in size of computer programs, the Center can anticipate needing to trade up to a new server within the next one to three years.

Two further developments in the computer capacity of the Center have been the acquisition of Teleforms software technology and the development of a large data base library. The Teleforms software allows survey data to be scanned directly into a database using optical character recognition; the software was acquired to facilitate data acquisition and storage in upcoming projects. The purchase of the technology was funded by the School of Medicine's Shared Research Equipment Fund. Using this methodology, the Center will be able to develop forms for each ongoing research project that will allow direct scanning of data into the research database. With careful database development at the beginning of each project, much of the front-end data collection and entry work can be minimized.

A final development in the area of computers is the planned development of a large data base library. Using Center funding for staff, large public domain data bases (e.g. NHANES, CHS, etc.) will be put into usable form for researchers both within the Center and on the main campus, hopefully facilitating further collaboration between the Center and other campus researchers.

Center Core Faculty and Staff

Center professional staff currently consists of a Director (Richard Kravitz, MD), an Associate Director (Edward Callahan, PhD), and a full time Research Scientist (Fred Molitor, PhD). In response to the continuing rapid growth of the Center, Christine Harlan was appointed as the program manager to meet administrative needs. An additional Administrative Assistant II, Mairin Rooney, has been hired to facilitate grant-related activities and to provide faculty support to Dr. Romano. There are two administrative positions currently vacant. One Administrative

Assistant II will serve as receptionist and provide general administrative support to the Director, seminar series, journal club and Executive Committee. The other position is a part-time Administrative Assistant I providing support to Drs. Leigh, Callahan and Molitor and Ms. Harlan.

Since the last report, the Center research staff has grown significantly in an effort to keep up with the Center's expanding research portfolio. The research staff currently includes one statistical programmer, two nurse abstractors, seven research assistants and five student interns. To cover projects slated to begin this Fall, the Center is now in the process of hiring an additional programmer, two full-time project managers, and a research secretary.

Dr. Rahman Azari has continued as a part-time faculty member with the Center, holding the role of core Center statistician. A faculty member in the Division of Statistics, Dr. Azari assists Center faculty in the development of new research proposals. He maintains regular office hours at the Center to provide limited consultation to faculty members. Depending on funding availability, Dr. Azari is also available to provide assistance on ongoing research projects. Since July 1998, the Center has also had Steven Samuels, PhD available to provide additional statistical support for Center projects. Dr. Samuels is Adjunct Professor in the Department of Epidemiology and Preventive Medicine. His special expertise is in research design and sampling. During fiscal year 1998-99, he spent approximately ½ day per week on site at the Center. His time was funded by a combination of core Center funds, research grant cost recovery, and a contribution from the Department of EPM.

Executive Committee

The Executive Committee continues to provide guidance to the Director on the long-term development of the Center as well as providing operational guidance, determining the allocation of Center resources, reviewing and approving faculty membership applications, etc. Executive Committee membership for the year 1998-99 included:

Faculty

Richard L. Kravitz, M.D., M.S.P.H.
Klea D. Bertakis, M.D., M.P.H.

Rahman Azari, Ph.D.
Edward Callahan, Ph.D.
Christiana Drake, Ph.D.
Nathan Kuppermann, M.D., M.P.H.
Joy Melnikow, M.D., M.P.H.
John Robbins, M.D., M.S.P.H.
Patrick Romano, M.D., M.P.H.
Marc Schenker, M.D., M.P.H.

Department

Center Director, Division of General Medicine
Founding Director, Family and Community
Medicine
Division of Statistics, Core Statistician
Family and Community Medicine
Statistics
Pediatric Emergency Medicine
Family and Community Medicine
General Medicine
General Medicine
Epidemiology and Preventive Medicine

Faculty Membership in the Center

Faculty membership increased during the past year to 69 members. Of this number, 51 hold their primary faculty appointment in a department in the School of Medicine and 18 (26%) hold a faculty appointment with other departments in the University or with organizations outside of the University. A list of faculty members is appended in Appendix #1.

Outreach Activities

Intramural outreach. In ongoing efforts to channel the expertise and enthusiasm of UCD faculty into projects related to its mission, the Center has continued a multi-pronged outreach campaign. The Core Center faculty and staff have played key mentorship roles with junior faculty and post-doctoral fellows, including Susan Murin (Pulmonary Medicine), Anthony Jerant (Family and Community Medicine), Douglas Zatzick (Psychiatry); Gabrielle Cerda (Psychiatry); Jorge Garcia (Medicine); Shagufta Yasmeen (Medicine/Gynecology); Jeanny Park (Pediatrics); and Jonathan Neufeld, Ph.D., Behavioral Health Center/Family Medicine/Psychiatry, James Marcin (Pediatrics), Lisa Guerra (Pediatrics) and Caroline Chantry (Pediatrics). In addition, the Center has continued its efforts to introduce faculty in the statistical and social sciences to the excitement of multidisciplinary applied health care research. In 1998-99, several non-SOM faculty assisted with Center proposals or projects: Robert Bell, PhD (Communication); Donald Palmer, PhD (GSM); Jane Ling-Wang (Statistics); Christiana Drake (Statistics); Alan Fenech (Statistics); Roberta Loewy (Philosophy); and Karen Kurasaki (Psychology). In addition, the Center was recently asked by Dr. Gary Henderson (Department of Pharmacology) to assist in an evaluation of computer-based learning.

In recognition of the importance of fostering collaborations between UCD clinicians (who mainly work in Sacramento) and UCD social and statistical scientists (based mainly in Davis), Dr. Edward Callahan has begun efforts to reach social science faculty from the Davis campus for collaborative research. While the Yolo Causeway remains a great barrier to collaboration between the campuses, these efforts will continue.

Extramural outreach. The Center continues to exercise its potential as a resource for the Medical Center, the University, and the Sacramento region. Dr. Kravitz and Dr. Romano have continued to work closely with the UCDMC Clinical Resource Management in constructing approaches to quality of care assessment. For example, under the guidance of Dr. Kravitz and Dr. David Rocke (a Center member), Catherine Mori, a graduate student enrolled in the UCD Graduate School of Management, prepared an asthma care cost-identification analysis. Dr. Romano has shared his expertise with the HCUP quality indicators in several meetings with CRM Personnel. And Center faculty continue to serve on a number of key University, School, and Medical Center committees, including Information Services (Kravitz), Research Affairs (Kravitz, Callahan), Clinical Trials (Kravitz, Pan, Hogarth), and the Graduate Group in Epidemiology Steering Committee (Romano).

In other outreach activity, the Center has prepared a brochure highlighting services and expertise available for health services and outcomes research. The Center sent an introduction letter along with this brochure to regional Health Officers and Section Chiefs within the Department of Health and Human Services. Dr. Kravitz and Ms. Harlan visited the office of State Senator Jackie Spier. A Center web site is available on the world wide web via the Health System Home Page (http://web.ucdmc.ucdavis.edu/chsr_pc).

Meetings of external advisory board. In Fall 1997, the Center Executive Committee decided that the Center had reached sufficient maturity to convene an External Board of Advisors. With the assistance of Tom Hobday and his staff at UCD Health Science Advancement, the Center initially recruited eight distinguished leaders from academia, medicine, industry, and law. The inaugural meeting of the Board was held at the Broadway Building in May, 1998. Since that meeting, three additional board members have been recruited. The purpose of the Board is to provide Center leadership with advice on the direction of its programs. The Board met twice during the 1998-1999 academic year. The next meeting is scheduled for October 20, 1999. A list of current Board members is provided as Appendix 2.

B. Research Proposal Development

Providing assistance in the development and submission of new research proposals remains a major objective of the Center. In particular, the Center seeks to help junior faculty members develop their own areas of research. Particular emphasis is placed on helping in the development of proposals to initiate pilot projects as well as full research programs. On the intramural side, the Center this year assisted faculty with proposals to the Hibbard E. Williams Research Fund (two of the preproposals were selected for further development and ultimately funded) and to the new Health System Research Fund. The Center also submitted a total of 19 proposals to extramural funding agencies including the U.S. Agency for Healthcare Policy and Research, the National Institute on Aging, the Office of Statewide Health Planning and Development, the Robert Wood Johnson Foundation, and the American Heart Association. Appendix 3 summarizes these proposals and indicates their funding status.

C. Research Proposal Development Kit

Since the Center is involved in new proposal development so frequently, the staff developed a kit for research proposal planning and development under Edward Callahan, Ph.D., Associate Director. The proposal kit guides the development of a research project from an initial idea through to a complete project with detailed budget and statistical analysis. The kit was used by several members of the Center during this academic year and was distributed to interested faculty on the main campus by Ann Bonham, Ph.D., Chair of the Research Affairs Committee. Initial evaluations of the use of the proposal kit were quite positive.

D. Active Research Projects during 1998-1999

1. New Initiatives Reserves: Practice Based Research Network (PI: Richard Kravitz, MD, MSPH)

In 1997 the Center received 3 years of University funding from a New Initiative Reserve proposal. The concept was to form a voluntary practice-based research network where ideas would be generated by the practicing physician themselves through conferences and seminars. The physicians were to be involved in defining the practice-relevant questions, participating in the study design, and interpreting the results. Through this collaboration, the goal is to turn the ideas, insights, and curiosity of community physicians (including members of the UCD Primary Care Network) into high-quality research projects that assist the health care community address critical questions related to health care access, costs, and quality. Progress under this initiative is summarized in a separate annual report to the Vice Chancellor for Research.

2. Patient-Physician Communication Project (PI: Richard Kravitz, MD)

Funded by a Robert Wood Johnson grant, PPCP is a study to investigate patient requests and physician responses in a changing health care environment. The objectives are: 1) to describe how patients use requests to influence physician behavior under managed care; and 2) to compare patients' uses of requests and physicians' responses to them in different interpersonal and organizational contexts. Information derived from this study will help physicians develop successful strategies for clinical negotiation and help policymakers assess the impact of managed care arrangements on the request-response process. The ultimate goal is to involve 44 physicians and 880 subjects.

Funding for this project was received in 10/98. Piloting of the questionnaire and training of student Research Assistants occurred between 11/98 and 2/99. Data has been collected from 404 subjects and 28 Doctors between 2/98 and 6/99. Data entry and cleaning began 6/99.

November of 1999 should mark the completion of data collection. Data analysis will begin at this time. Around the end of 1999 or early 2000, the participating physicians will attend a colloquium and receive 5 CME credits.

3. Improving End-Of-Life Care for Selected Populations Project (PI: Frederick J. Meyers, MD)

Under a grant from the Robert Wood Johnson Foundation, the aim of the Improving End-Of-Life Care for Selected Populations project is to enhance knowledge and improve clinical practice of palliative care, resulting in expanded access for underserved populations – residents of rural areas and women in correctional facilities. One component of this project includes recruiting patients with life-threatening malignancies from a clinical trial program at the UCD Cancer Center. One group of patients receives palliative care from a nurse and social worker; the other group obtains traditional disease-directed therapy only. Repeated measures provide the “simultaneous care” team with information to make treatment decisions, and will be used to compare quality of life over time between the two groups of terminally ill study participants. Over the three-year project period, the investigators hope to enroll 30 patients in simultaneous

care, and a comparable number of comparison group patients. Since April, 15 patients (11 simultaneous care, 4 comparison) have been recruited in this project

4. Cesarean Section Rate in California (Co-investigators: Richard Kravitz, MD, MSPH; Patrick Romano, MD, MPH; Joy Melnikow, MD)

A core group of Center faculty (Richard Kravitz, MD and Patrick Romano, MD [General Medicine], Joy Melnikow, MD [Family and Community Medicine], William Gilbert, MD and Nina Boe, MD [Obstetrics and Gynecology] and Carol Franz, PhD [CHSR/PC]) has been collaborating with the Office of Statewide Health Planning and Development (OSHPD) in a two part project on the Cesarean Section rate in California. Phase 1 was completed in April 1997, culminating in a report to an OSHPD committee of experts on cesarean section in May 1997. On the basis of that report, two research projects were identified --a study of the processes of care in high and low cesarean section hospitals, and a study of the role of opinion leaders--that comprise Phase 2 of the contract. Work on these projects began in June 1997 and is to be completed by June 1999.

In the first project the processes of care at the time of delivery in hospitals with high and low cesarean rates are analyzed and compared in 1992 and 1996. The second project investigates whether obstetric opinion leaders can be identified, evaluates the attitudes toward cesarean section of practicing California obstetricians and family practitioners, and examines the relationship between attitudes of opinion leaders and physicians delivering infants in a particular hospital with the cesarean delivery rate at that hospital.

5. Improving the Quality of Care among Multiethnic Urban Trauma Victims (PI: Douglas Zatzick, MD)

The goal of this longitudinal research is to assess and follow the self-described needs and expectations for care, psychiatric symptoms, functional impairments, and patterns of posttraumatic health services of multiethnic urban trauma victims. One hundred and seventeen patients were recruited from the trauma ward at the UC Davis Medical Center. All subjects consented were initially interviewed on the ward and then followed by telephone interviews at 1 month, 4 months and 1 year. Recent approval from the HSRC has allowed for a continuation of the study for five years.

On the surgical ward, 88 of the 117 (73%) patients had high levels of depressive symptoms during their inpatient hospitalization. On the surgical ward, 30% of patients had high levels of posttraumatic symptoms. One month after their surgical ward admission, 66 patients (65%) continued to demonstrate high levels of depressive symptoms while 37 patients (37%) met symptomatic criteria for posttraumatic stress disorder. As part of the Hibbard E. Williams Award funded project, a case management intervention was piloted in a sub-sample of 34 patients. The design of the intervention was a randomized controlled trial in which trauma ward patients were assigned either to the case management intervention (N=16) or a "usual care" control (N=18). Three highly trained case managers (i.e., two psychiatrists and one trauma clinical nurse specialist) followed patients for four months after their surgical ward admissions. Case managers were trained in brief alcohol/drug and posttraumatic stress symptom interventions. The case management intervention also included a number of supportive aspects

including attempts to coordinate care across surgical, primary care and mental health sectors and interventions targeting functional rehabilitation. For the coming year, program staff will 1) continue telephone follow-ups for currently enrolled subjects and 2) continue data entry and data analysis.

6. A Taxonomy of Patient Requests and Physician Responses under Managed Care (PI: Richard Kravitz, MD, MSPH)

Dr. Kravitz was awarded funding by NIH (AHCPR) in March 1998 to refine an empirical content analysis system for coding patients' requests, to estimate the prevalence of different request types and physician responses, and to elucidate the antecedents and consequences of problematic requests in managed care settings. These objectives will be accomplished by: 1) adding new codes to enhance TORPs relevance to managed care; 2) producing additional evidence for TORP's reliability; and 3) performing a series of analyses designed to assess the concurrent, construct, and predictive validity of the enhanced taxonomy.

The focus of the project, to date, has been on refining the existing coding system and developing high levels of intercoder agreement. This process has involved collaboration with Dr. Ezra Amsterdam (Cardiovascular Medicine) and Robert Bell, PhD (Communications) in conjunction with the Center's research team assigned to the project. In addition, data were collected from 60 cardiology patient/physician encounters in order to validate the newly derived TORP coding scheme. Cardiology was selected because cardiologists care for many of the same types of patients as general internists and because a number of previous studies have focused on this inter-specialty comparison. One manuscript resulting from this work is in press and a second is in preparation.

7. Building Health Care Infrastructure for Out-of-Treatment Drug Users (PI: Neil Flynn, MD; Investigators of the evaluation component: Richard L Kravitz, MD, MSPH; Douglas Zatzick, MD; Steve Samuels, PhD)

In January 1998, the Center was asked to evaluate a program that had been developed to provide an effective infrastructure to decrease the spread of infectious diseases among drug users and provide case management services to facilitate medical care, with an emphasis on prevention, early intervention, and cost containment. Lacking sufficient personnel to conduct the evaluation at the time, the Center subcontracted with Karen Kurasaki, PhD of the UCD/National Center for Asian American Mental Health Research to conduct the two-year evaluation. The aims of the evaluation are to examine whether the intervention is reaching its target population, if it is being implemented in the ways envisioned, if the intervention is effective, and how much the intervention costs.

8. Patient Preferences for Physician Characteristics and the Quality of Patient Care (PI: Garcia)

The goal of the project is to determine whether ethnic or cultural differences between patients and their physicians have a negative impact on patient satisfaction and on the perceived quality of care. The project involves two phases (1) the development of a reliable and valid telephone survey from findings obtained in eight patient focus groups and (2) the administration

of this survey to 524 primary care patients (Caucasians, African-American, and Latinos) to identify variations of preferences among ethnic groups.

In the coming year, a preliminary qualitative analysis of Phase I data and initiate Phase II of the project will be conducted. The former will allow us to complete the development of our quantitative telephone survey. Once this instrument is finalized, patient recruitment will begin for Phase II of the study. The current plan is to enroll 131 established primary care patients (with at least two primary care clinic visits during the preceding 18 months) from each of four patient groups: (1) African-Americans, (2) Caucasians, (3) English proficient Latinos, and (4) non-English-speaking Latinos. These patients will be recruited from either the General Medicine or the Family Practice clinics at UCDMC. Data from the surveys will provide insight into whether ethnic or cultural differences between patients and their physicians affect patient satisfaction and the perceived quality of care.

9. HEALTH Project (PI: Kravitz)

The mission of the Healthcare Empowerment Alliance for People Living in Transitional Housing (HEALTH) project is to meet the healthcare needs of formerly homeless persons living in transitional housing facilities (THF). To this end, an Integrated Service Team (IST), consisting of a medical director, nurse practitioner, and medical clerk, will provide direct medical and healthcare services and referrals to residents of four THF in the Sacramento area. In evaluation of the HEALTH Project, the CHSR/PC is collecting interview data before and during implementation of IST services. To monitor the perceptions of those involved in the project, as well as those expected to benefit from it, the CHSR/PC conducted semi-structured interviews with HEALTH Board members, and staff and residents of the THF. With the recent hiring of the IST, the CHSR/PC is in the process of preparing to collect baseline survey data from the residents of the four intervention THF. These qualitative and quantitative measures will be collected at 6-month intervals to determine changes in health care access, knowledge, behavior, and status.

10. Miscellaneous Consultation

In addition to the formal projects listed above, Center staff provided both paid and unpaid research and statistical consultation to John Lee (Gastroenterology); Susan Murin (Pulmonary); Gregory Marelich (Pulmonary); Donna McKenzie (Clinical Resource Management); Tom Nesbitt/Jana Katz (Telemedicine); and Frederick Meyers (Medicine).

E. Education Activities

One of the fundamental aims of the Center is to enhance the intellectual environment for health services research at UC Davis and to help faculty and trainees develop the skills to conduct first-class health services research projects. To this end, the Center continued its successful noontime seminar series which has expanded to a weekly event due to popular demand. Convened under the leadership of Patrick Romano, M.D., M.P.H., seminars are open to all Center members and other interested individuals. Continuing Medical Education credit is available to practicing physicians, and graduate students in Epidemiology can earn 1 unit of course credit for each quarter of regular attendance. During the past year, 35 seminars were held, covering a broad range of topics. A list of these seminars can be found in Appendix 4.

Beginning in March, 1998, the Center launched a new educational offering targeted at junior faculty. This *Health Services Research Journal Club* is held Thursdays from 9-10 a.m. in Room G032 PSSB. This seminar uses guided discussion of recent articles in the health services research literature to illustrate important methodological or policy principles. Led by Richard Kravitz, MD, MSPH, and Patrick Romano, MD, MPH, the Journal Club has attracted the regular participation of Kathrine Gundling (Internal Medicine); Jorge Garcia (Internal Medicine); Lisa Guerra (Pediatrics); Michael Hogarth (Pathology); Rosemary Kelly (Psychiatry); Donald Hilty (Psychiatry); James Marcin (Pulmonary Medicine); Susan Murin (Pulmonary Medicine); Fred Molitor (CHSR/PC); Brian Markoff (Medicine); Chip Hixon (Family & Community Medicine); Shagufta Yasmeen (Medicine/Gynecology Fellow); Jonathan Neufeld, Ph.D. (Psychology Fellow at the Behavioral Health Center); and William Seavey (Geriatrics Fellow). Following a summer break, the seminar will resume in September, 1999.

As part of the New Initiative Reserve-funded project to develop a practice-based research network (PBRN), the Center is developing a framework for research training in primary care settings. This effort is expected to draw undergraduate and graduate students into multidisciplinary projects conducted within the PBRN.

One of the Center's strategies for accomplishing both its research and educational missions has been to encourage involvement of UC Davis students in all aspects of its research endeavors. Students work on Center projects as paid staff, unpaid volunteers, and academic interns who receive course credit. A list of students involved in Center projects this past year is provided in Appendix 5.

E. Faculty Recruitment

The establishment of the Center in 1995 was accompanied by the promise of two University 19900 FTEs. Recruitment began in earnest that year and continued through 1996. After a difficult initial recruitment experience, the Center has been much more successful. J. Paul Leigh, PhD (0.50 Center FTE, with joint appointment in Epidemiology) was the first candidate appointed, while Patrick Romano, MD, MPH has been appointed since (0.50 Center FTE, with joint appointments in Internal Medicine and Pediatrics). These appointments were among the top choices from a field of 57 candidates. Dr. Leigh is an econometrician from San Jose State University.

II. Long-Term Strategic Planning

In concert with its Executive Committee and external Board of Advisors, the Center continues to focus on three areas of perceived competitive advantage: proximity to State government; location in rural Northern California; and access to a large network of primary care physicians. As reported earlier in this document, the Center convened a joint UCD/State Research Symposium and is working with Advisory Board members and the UCD Public Service Research Program (Dennis Pendleton, Director) to develop new linkages to State government. In the area of rural health, the Center continues to work closely with Dr. Tom Nesbitt in evaluating rural health and telemedicine projects and with Dr. Fred Meyers in assessing the impact of palliative care outreach to rural areas. In the area of primary care practice, PC-AWARE continues to grow (see above), and several individual investigators have also utilized Primary Care Network (PCN) sites to conduct their research. Continued attention will be needed to assure that the incredible research resource represented by the PCN is not neglected or “over-planted”. Research projects in real practice settings must be carefully planned to avoid or minimize disruptions in service, and appropriate incentives must be developed to encourage primary care practitioners to participate in the production of new knowledge.

In 1998-99 the Center continued to progress through the steps required to achieve status as an Organized Research Unit (ORU) of the University. The Center is now slated to become the first Organized Research Unit in the School of Medicine during the 1999-2000 academic year. After review by several University committees, the application has received universal support since its submission to Vice-Chancellor Kevin Smith in Fall 1998. Attaining ORU status will enhance the Center’s credentials as a multi-disciplinary research arm of the University. However, a plurality of faculty will continue to be based in the School of Medicine and ongoing financial support from the UC Davis Health System will be vital to assuring that the Center can continue to fulfill its mission in the years ahead. In the long run, it would be highly valuable to establish an endowment fund that could assure a long-term, stable financial base.

III. Financial Reporting

For the year 1998-99, the Center had expended \$145,450 in core funds, leaving a balance in the core account of \$73,350. In addition, the Center spent \$354,790 in direct support of Center-sponsored research projects. In 1999-00, project expenditures of \$429,023 in research funds and \$245,000 in core funds are anticipated.