The UCD Center for Health Services Research in Primary Care has now completed an initial planning year followed by three years of development, carefully building new expertise, experience and relationships within the University and with outside partners during this time. During the past year, the Center has greatly expanded its research and educational activities. This annual report provides an overview of the activities and accomplishments of this year.

I. Activities and Accomplishment of Current Year

A. Administrative and Organizational Development

Center Leadership

During this reporting period, Richard L. Kravitz, MD, MSPH, continued to serve as Center Director. In view of the expanding portfolio of Center activities and in consultation with Center members and the Dean, School of Medicine, Dr. Kravitz invited Edward J. Callahan, PhD, to serve as Center Associate Director. Dr. Callahan is Professor of Family and Community Medicine and an experienced health services researcher. He accepted the position effective July 1, 1998.

New Reporting Relationships

With the transition of the School of Medicine Deanship from Gerald Lazarus, MD to Joseph Silva, Jr., MD, in June 1998, the Center assumed a new position in the School reporting structure. Dr. Kravitz now reports to Frederick J. Meyers, MD, (Chairperson, Department of Medicine) concerning day-to-day administrative affairs and to Fitz-Roy Curry, PhD (Associate Dean for Research, SOM) for long-term programmatic affairs. It is anticipated that these reporting relationships will be modified further if and when the Center achieves designation as an Organized Research Unit (ORU) (see below).

Remodeling of Center Space

During the past year, the combination of rapid growth of funded Center research activities and successful faculty recruitments has generated new space needs. These needs will be accommodated by a remodeling project that will create one additional enclosed office and several new cubicles within existing Center space in Suite 2500 of the Patient Support Services Building (PSSB) on the UCDMC campus. Remodeling is to take place in early September 1998.
As reported last year, the generosity of the Department of Medicine allowed the Center to purchase a Hewlett Packard LH Plus server and five 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. Some support is provided by the Department of Medicine and the Health System’s Information Services Department, but the Center has also used some of its own core funds to contract for computer maintenance with an outside consultant.

Center Core Faculty and Staff

Center administrative staff currently consists of a Director (Richard Kravitz, MD), an Associate Director (Edward Callahan, PhD), a Research Coordinator (Carol Franz, PhD), and an Administrative Coordinator/AAII (Christine Harlan). In addition, Jerri Kientzel (AAI) serves as receptionist and provides general administrative support to the Director and to Ms. Harlan. Jane Fox-Garcia, who served as part-time administrative director during the Center’s formative years, was recalled to full-time duties with the Department of Family and Community Medicine in July 1997.

Since the last report, the Center research staff has grown significantly in an effort to keep up with the Center’s expanding research portfolio. Directed by Carol Franz, PhD, the research staff currently includes a statistical programmer, 2 nurse abstractors, 7 research assistants and 5 student interns. To cover projects slated to begin this Fall, the Center is now in the process of hiring an additional 0.5 FTE programmer, 2 full-time project managers, and a research secretary.

Dr. Rahman Azari 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. Beginning in July 1998, the Center commissioned Steven Samuels, PhD 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 will spend approximately ½ day per week on site at the Center. His time is 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. The Center’s bylaws were amended this past year to clarify procedures for rotating Committee membership. During this reporting period, Craig McDonald (at large), Thomas Nesbitt (at large), and L. Jay Helms (core economist) submitted their resignations. A nominating committee consisting of John Robbins, Patrick Romano and Klea Bertakis solicited nominations for the two
vaccant at-large positions; a vote of the membership is pending. Dr. Helms position will be filled by the incoming Core Economist, J. Paul Leigh (see section on faculty recruitment, below). Executive Committee membership for the year 1997-98 included:

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richard L. Kravitz, M.D, M.S.P.H.</td>
<td>Center Director, Division of General Medicine</td>
</tr>
<tr>
<td>Klea D. Bertakis, M.D., M.P.H.</td>
<td>Founding Director, Family and Community Medicine</td>
</tr>
<tr>
<td>Rahman Azari, Ph.D.</td>
<td>Division of Statistics, Core Statistician</td>
</tr>
<tr>
<td>Edward Callahan, Ph.D.</td>
<td>Family and Community Medicine</td>
</tr>
<tr>
<td>L. Jay Helms, Ph.D.</td>
<td>Economics, Core Economist</td>
</tr>
<tr>
<td>Craig McDonald, M.D., M.P.H.</td>
<td>Physical Medicine and Rehabilitation</td>
</tr>
<tr>
<td>Joy Melnikow, M.D., M.P.H.</td>
<td>Family and Community Medicine</td>
</tr>
<tr>
<td>Thomas S. Nesbitt, M.D., M.P.H.</td>
<td>Family and Community Medicine, Rural Health and Telemedicine Program</td>
</tr>
<tr>
<td>John Robbins, M.D., M.S.P.H.</td>
<td>General Medicine</td>
</tr>
<tr>
<td>Patrick Romano, M.D., M.P.H.</td>
<td>General Medicine</td>
</tr>
<tr>
<td>Marc Schenker, M.D., M.P.H.</td>
<td>Epidemiology and Preventive Medicine</td>
</tr>
</tbody>
</table>

Faculty Membership in the Center

Faculty membership increased during the past year to 62 regular or affiliate members. Of this number, 44 hold their primary faculty appointment in a department in the School of Medicine and 18 (29%) 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. First, the Center continues to publish a quarterly newsletter, now in its second year. This document is distributed to the entire Center membership as well as other UCDMC and campus leaders; it summarizes Center research activities, highlights funding opportunities, and allows the widely dispersed membership to become familiar with other members’ work. Copies of the newsletter are attached as Appendix 2. Second, the Center Director and Research Coordinator have played key mentorship roles with junior faculty, including Douglas Zatzick (Psychiatry); Gabrielle Cerda (Psychiatry); Jorge Garcia (Medicine); Shagupta Yasmine (Medicine/Gynecology); and Jeanny Park (Pediatrics). Third, the Center has redoubled its efforts to introduce faculty in the statistical and social sciences to the excitement of multidisciplinary applied health care research. In 1997-98, several non-SOM faculty assisted with Center proposals or projects for the first time: 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), the Center has asked Dr. Ed Callahan to develop a plan for campus outreach. Through his efforts, we expect the number of truly interdisciplinary collaborations in health services research within the UCD system to increase significantly over the next year.

**Extramural outreach.** Though well known to its membership and an expanding cadre of researchers, the Center has been less successful in publicizing its potential as a resource for the Medical Center, the University, and the Sacramento region. Therefore, the Center Director has made presentations to various groups during the past year including the Division of Emergency Medicine, the Primary Care Network physicians, and the SOM Council of Deans and Chairs. Dr. Kravitz and Dr. Romano have continued to work closely with Dr. Garrett Foulke and UCDMC Clinical Resource Management in constructing approaches to quality of care assessment. The Center also participated in the 1998 “Future Faire” by organizing a multidisciplinary presentation centered on the theme of ethnicity and culture in medical practice. Presenters included Richard Kravitz (Director, CHSR/PC); Douglas Zatzick (Psychiatry); Robert Davidson (Family and Community Medicine); and Karen Kurasaki (National Research Center for Asian American Mental Health and Department of Psychology). Dr. Kravitz has met with Drs. Neal Kohatsu (California Department of Health) and David Werdegar (Director of the Office of Statewide Health Planning and Development) to discuss potential joint programs. Finally, Dr. Kravitz and Center Administrative Assistant Christine Harlan met with Sierra Health Foundation program officers Leah Morris and Tom Bennett to explain Center priorities and identify potential future collaborations. Additional meetings with other foundations are in the planning stage.

**Joint UCD/State DHS Research Symposium.** To address its stated priority of becoming a resource to the State of California for health policy and analysis, the Center worked closely with the California Department of Health to convene a joint research symposium. This half-day meeting was held June 3, 1998, at the UCDMC Cancer Center. There were over 75 attendees spanning numerous campus and State departments. Following a plenary introduction by Drs. Kravitz and Anders (representing UCD) and Drs. Kohatsu and Stratton (representing the State), participants broke into four working groups: Maternal and Child Health, Chronic Disease, MediCal Policy, and Aging. Numerous new contacts were made and several potential research projects were discussed. A list of attendees and summary of the meeting is attached as Appendix 3. Formal evaluations by participants were very favorable. Plans for follow-up are now under discussion.

**Establishment of an 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 8 distinguished leaders from academia, medicine, industry, and law. The inaugural meeting of the Board was held at the Broadway Building on May 12, 1998 from 6:00-8:30. Since that meeting, 3 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 will meet twice yearly, with the next meeting scheduled for October 20, 1998. A list of current Board members is provided as Appendix 4.

**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 assist junior faculty members develop their own area of research, including the development of proposals to initiate pilot projects as well as full research program. On the intramural side, the Center this year assisted faculty with proposals to the Hibbard E. Williams Research Fund (n=2) and the new Health System Research Fund (n=1). The Center also submitted a total of 14 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 5 summarizes these proposals and indicates their funding status.

C. Active Research Projects during 1997-1998

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 idea 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 involved in defining the practice-relevant questions, participating in the study design and interpretation of the results. Through this collaboration we hope to turn the ideas, insights, and curiosity of our physicians into high-quality research projects that assist the health care community address critical questions related to health care access, costs, and quality.

   During the spring of 1998, a variety of pilot research projects were evaluated for their feasibility and interest to primary care physicians. Two projects were selected: a survey of women patients’ awareness of osteoporosis and a study of the relationship between nutritional intake and anemia in WIC children. These projects are being managed by Center staff. The purpose of the Osteoporosis Study is to find out the present status of medical care and disease awareness of qualified patients within the UC Davis Primary Care Network concerning osteoporosis in order to develop better educational programs for patients and physicians. The purpose of the Childhood Anemia Study is to evaluate the utility of routine hematocrit determinations among children enrolled in the WIC program. At the time of this writing, the Osteoporosis project is underway and the Anemia study is in the late planning stages.

2. UCDHS Primary Care Network Quality Management (Co-Investigators: Richard L Kravitz, MD, MSPH; Patrick Romano, MD, MPH)

   Funded by the UCDHS, the PCN Quality Management project, conducted by Richard Kravitz, MD, Patrick Romano, MD, and Catherine Donovan, RN, involved the administration of a patient health status and satisfaction survey to over 3500 patients from 95 physicians at 13 UCD PCN sites. This study replicated the data collected in 1996-1997; an additional data collection targeted patients with asthma in order to examine the prevalence, health and treatment patterns of this group of patients in the PCN. Project goals included assessment of patient perceptions of quality of care in the PCN and the extent to which patients were receiving...
preventive care. Overall satisfaction with care was “very good” to “excellent”; significant regional variations in satisfaction with and quality of care were found. Data on preventive care from the 1996-1997 data collection were presented at an ISQUA conference on quality in health care in November 1997.

3. Correctional Telemedicine Evaluation (PI: Richard Kravitz, MD)

An evaluation of the Correctional Telemedicine project was initiated in the spring of 1997, led by Richard Kravitz, MD. This project is funded by the UCDHS, Rural Health and Telemedicine Project. The purpose of the project was to assess the perceived usefulness of the UCD telemedicine services to jail clinicians and the costs of the services to the jail and to UCD. Intervention specialties are ENT, Orthopedics and Dermatology; control specialties are ophthalmology, urology, neurology and gastroenterology. During the project, evaluation instruments and an interview were derived, stakeholders in the program were interviewed concerning the perceptions of the goals, benefits and problems potentially associated with the program. In addition, satisfaction data were collected based on actual telemedicine encounters between inmates, jail physicians and UCD specialists. Significant changes in the scope of the project occurred in the course of the project that affected the program and its evaluation. First, in October 1997, on the basis of corrections administration concerns, more clinics and more specialties were added to the telemedicine program. Second, the program was suspended March 28, 1998, in order to construct a better site for the telemedicine equipment at the jail. Patients were not seen again until July 23, 1998, which was after the period of the evaluation had ended.

4. Adolescent Mental Health in Primary Care (PI: Emily Harris, MD)

Emily Harris, MD (Psychiatry) received Hibbard E Williams funding to examine adolescent mental health in primary care settings. Following a pilot study coordinated by center staff in spring 1997, during the 1997-1998 fiscal year, Center staff contacted over 900 PCN parents to request the participation of their adolescent child in the validation portion of the study. These contacts resulted in permission to collect data 240 adolescents randomly selected from all of the different PCN sites. Adolescents completed self-report questionnaires regarding their psychological problems, general health, and functioning in a variety of settings (school, work, family, peers). Following completion of the questionnaire, they were administered clinical diagnostic interviews over the telephone by trained psychologists/psychiatric residents. Among the goals of the project were 1) to establish rates of psychological disorders among adolescents needing medical care; and 2) to validate new measures appropriate for adolescents (in the past questionnaires have been oriented towards children or adults, not adolescents). Preliminary results indicated meaningful rates of psychological disorders among adolescents—especially depression and dysthymia, with significantly lower levels of functioning among adolescents with psychological problems. Data examining the concordance between self-report and clinical interview report of problems has yet to be analyzed. Dr. Harris reported on the preliminary data in a variety of venues including NIH sponsored conference, grand rounds at UCDMC, and lectures sponsored by several PCN sites.

5. 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. In the future it is hoped that, if opinion leaders can be identified, they can assist the dissemination of information relevant to attaining and maintaining an appropriate cesarean delivery rate in California.

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

Douglas Zatzick, MD, received Hibbard E. Williams funding to examine psychiatric disturbances among multiethnic urban trauma victims. This project is the first of a series of studies designed to better understand the psychosocial needs of multiethnic urban trauma victims treated in the surgical subspecialty and primary care sectors. By better understanding the relevant dimensions of care, clinical effectiveness trials, implementing patient-centered case management are being developed. The project involved an analysis of data from the UC Davis Trauma Surgery Registry as well as collection of preliminary data from an ongoing clinical evaluation of psychiatric disturbance among patients hospitalized on surgical trauma wards. The goal of this preliminary study was to understand impact of psychiatric disturbances and key covariates such as race, on posttraumatic health service utilization and costs. In this preliminary investigation we are particularly interested in determining factors associated with costly increases inpatient trauma admission length of stay, above and beyond injury severity and insurance status. The on-ward data collection was carried out by center staff. The Center also assisted Dr. Zatzick with preparation of a K-08 (career development) application to NIH which would allow him to develop further research into the area of psychiatric disturbance among urban trauma victims. This K-08 was funded starting August 1998.

Preliminary Findings: From 1993 to 1996, there were over 11,000 admissions to the UC Davis trauma surgery service. Seventy percent of patients were admitted secondary to motor vehicle accidents or violent assaults. Approximately 40% of patients admitted to the surgery service were individuals of color with African Americans comprising 16%, Asians, 7%, and Hispanics 16% of patients admitted. Thirty-two percent of the patients admitted were women. Approximately one third of admissions were covered by HMO or private insurance, one third by Medi-cal, 9% by Medi-care, 18% by Sacramento county, and 8% with no sponsor. In
preliminary bivariate analyses Caucasian individuals had a significantly increase length of inpatient stay when compared to African American, Asian and Hispanics (ANOVA: df=4, F=9.1, P<.0001)

Of the 11,363 trauma admissions, 70% of patients were tested for blood alcohol; 35% of subjects tested positive. Of the 56% of patients receiving urine toxicology screens, 31% demonstrated a positive screen. High frequencies of alcohol related disorders (17%) and substance related disorders (17%) were observed; low frequencies of ICD-9 diagnosed depression (1.3%), adjustment reactions (<1%), acute stress reactions (<1%), and PTSD (<1%). In a preliminary sample of patients from the clinical trial, 64% screened positive for depression and 21% screened positive for acute stress reactions at the time they were assessed on the trauma surgery ward.

Further multivariate analyses are underway that will assess the contribution of psychiatric disturbances on hospital length of stay while adjusting for key covariates such as race and physical injury severity. Psychiatric disturbances appear to be a more frequent occurrence among multiethnic patients hospitalized on surgical trauma units than is evident using ICD-9 codes.

7. 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, preparations have been underway to collect data from 60 cardiology patient/physician encounters in order to validate the newly derived TORP coding scheme. This data collection will occur in late summer 1998. Since previous studies have shown measurable differences in resource utilization and style of care between different medical specialties, we the data collection will be launched in a single speciality--cardiology. Cardiology has been 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.

9. 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 cost.

10. **Patient Coaching to Improve the Care of Cancer-Related Pain (PI: Jennifer Wright, MSIV).**

   This project, funded in 1996 by a grant from the Bayer Health Communications Institute, was a randomized controlled trial evaluating the effect of an intensive patient coaching program on cancer pain control and health outcomes among oncology outpatients. Jennifer Wright, MSIV conducted the study, assisted by Dr. Kravitz, Dr. Azari, and Center Programmer/Analyst Ti-Kuang Lee.

11. **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 due to popular demand has expanded to a weekly event. 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 #6.

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, the Journal Club has attracted the regular participation of Rosemary Kelly (Psychiatry); Alan Koike (Psychiatry); Donald Hilty (Psychiatry); Jorge Garcia (Medicine); and Carol Franz (CHSR/PC); in Fall 1998 they will be joined by Brian Markoff (Medicine); Chip Hixon (Family & Community Medicine); Shagupta Yasmine (Medicine/Gynecology Fellow); and William Seavey (Geriatrics Fellow). Additional participants are welcome.

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, led by Marc Schenker, MD, MPH, 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 below.

### Students Involved in Center Research Projects: 1997-1998

<table>
<thead>
<tr>
<th>Student</th>
<th>Role</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leanne Le</td>
<td>Research Assistant</td>
<td>Urban Trauma</td>
</tr>
<tr>
<td>Sarah Barry</td>
<td>Research Assistant</td>
<td>Urban Trauma</td>
</tr>
<tr>
<td></td>
<td>Intern:</td>
<td>Osteoporosis Study</td>
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<tr>
<td></td>
<td></td>
<td>Adolescent Mental Health</td>
</tr>
<tr>
<td>Angela Okamura</td>
<td>Intern/ Research Assistant</td>
<td>Adolescent Mental Health</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PBRN (Osteoporosis &amp; WIC studies)</td>
</tr>
<tr>
<td>Randy Young</td>
<td>Research Assistant</td>
<td>Urban Trauma</td>
</tr>
<tr>
<td>Nina Godbole</td>
<td>Intern/Research Assistant</td>
<td>Harris Project</td>
</tr>
<tr>
<td>Tuyen Ho</td>
<td>Research Assistant</td>
<td>General Center Projects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Telemedicine Project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHPD: C-section project</td>
</tr>
<tr>
<td>Mike Goodell</td>
<td>Statistical Research Assistant</td>
<td>Assisted Dr. Azari on a variety of statistics projects</td>
</tr>
<tr>
<td>Carrie Willis</td>
<td>Honors Thesis</td>
<td>TORP project</td>
</tr>
<tr>
<td>Stephanie</td>
<td>Student Research Volunteer</td>
<td>TORP project</td>
</tr>
</tbody>
</table>

### 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. Although the first two cycles of recruiting brought forth several promising physician-scholars (3 of whom received offers), no offers were accepted. In Fall 1996 the search was broadened to include PhD social scientists as well as clinician scientists. From a field of 57 candidates, three were nominated for consideration by the Chancellor: Kathryn Phillips, PhD (.75 Center FTE); Abram Rosenblatt, PhD (O.25 Center FTE); and J. Paul Leigh, PhD (0.50 Center FTE). As of
August 1, 1998, the appointments of Dr. Philips and Dr. Leigh have been approved and both have indicated in writing that they will join the UCD faculty in Fall, 1998. Dr. Phillips is an expert in health policy and cost-effectiveness analysis from UCSF. She has been appointed as Associate Professor, Step I (0.75) and Associate Professor in Residence (0.25). Her department of record will be the Division of General Medicine (Department of Internal Medicine). Dr. Leigh is an econometrician from San Jose State University. He has been appointed as Professor/Professor-in-Residence, Step III with .50 FTE from the Center, .25 FTE from the Department of Epidemiology and Preventive Medicine, and .25 in-residence. Dr. Rosenblatt is the husband of Dr. Phillips and a distinguished mental health services researcher in his own right. If approved by CAP and the Chancellor, he will become Associate Professor/Associate Professor in Residence in the Department of Psychiatry.

II.  Long-Term Strategic Planning
In concert with its Executive Committee and external Board of Advisors, the Center continues to strive to maintain its 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 1997-98 the Center began the process of applying for status as an Organized Research Unit (ORU) of the University. After several rounds of review by the Executive Committee, the application is nearly complete and will be submitted to Vice-Chancellor Kevin Smith in early Fall 1998. Action is not expected for at least a year. Although attaining ORU status will enhance the Center’s credentials as a multi-disciplinary research arm of the University, it is expected that a plurality of faculty will continue to be based in the School of Medicine and that 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

From a financial standpoint, the Center conducts two major sets of activities that are funded by two primary sources. The first set of activities are research projects funded by contracts and grants. The second set of activities are “core support functions” currently funded by core dollars provided by the UCD School of Medicine and the Health System. Examples of the first set of activities are: preparing and mailing research questionnaires, conducting research interviews with research subjects, entering data, performing statistical analysis on data, preparing manuscripts for publication. Examples of the second set of activities include: assistance with proposal writing, statistical consultation for grant applications, assistance with proposal budgeting, coordination of Center seminars and journal clubs, oversight of project budgets, communication with funding agencies; community outreach; computer maintenance; and routine administrative functions such as ordering supplies. These core functions are critical to the useful operation of the Center, yet it is very difficult to identify sources of extramural funding to support them. Research grants will pay for research, but not for the expense of running a Center. Until a suitable alternative such as an endowment or a program-project grant (not currently available in health services research) can be obtained, continued intramural “core” support is essential.

The tables on the following several pages present actual or projected expenses and
sources of funding for 1997-98, 1998-99, and 1999-2000. For the year 1997-98, the Center began with a carry-over of $77,150 in core funds, which was supplemented by an additional $100,000 from the Dean’s office in accordance with a prior agreement. By year’s end, the Center had expended $94,340 in core funds, leaving a balance in the core account of $82,810. In addition, the Center spent $202,379 in direct support of Center-sponsored research projects. In 1998-99, we project expenditures of $429,023 in research funds and $150,115 in core funds. Current projections for 1999-2000 are for expenditures of $412,334 in research funds and $190,599 in core funds.