**Introduction**

Comparative effectiveness research (CER), the conduct and synthesis of research comparing the benefits and harms of different interventions and strategies to prevent, diagnose, treat, and monitor health conditions in "real world" settings, is a priority for the health of the nation.

The leadership of the UC Davis Clinical and Translational Science Center (CTSC) and the Center for Healthcare Policy and Research (CHPR) recognizes the importance of increasing the number of investigators trained to conduct CER. The CTSC and CHPR have collaborated extensively over the past year to enhance training and build capacity in comparative effectiveness research (CER). CHPR provides intellectual and administrative support to UC Davis faculty and trainees with interests in CER.

Training and education of the future workforce is at the core of the CTSC. The CTSC houses and coordinates the educational activities of the T32 (TL1) Pre-doctoral Clinical Research Training Program, the Mentored Clinical Research Training Program (MCRTP), the K12 Mentored Career Development Program, the California Institute of Regenerative Medicine Stem Cell Training Program, the Building Interdisciplinary Research Careers in Women's Health, and the Howard Hughes Medical Institute Integrating Medicine into Basic Science Training Program. The Mentored Clinical Research Program offers a Master of Advanced Study degree in Clinical Research. These programs coordinate and combine their research training curricula with the Primary Care Outcome Research Fellowship housed in the CHPR so that trainees in all programs are able to take advantage of coordinated curricular offerings in research methods.

In addition, the newly founded University of California, Davis Betty Irene Moore School of Nursing has matriculated the first class of graduate students, and these PhD and Master’s candidates will also have opportunities for coordinated training in research methodology.

**Approach**

The CTSC and CHPR have worked together to leverage the strengths of the training programs to build interest and develop new investigators with a focus on CER. The collaboration has included three major components to date:

- Joint funding of five CER pilot research projects
- Convening a regional conference on CER research methods
- Developing a four unit CER Methods course, supported by a CTSC supplement

**Results**

The CTSC and CHPR have funded five comparative effectiveness research (CER) pilot projects through a competitive application process. Among the range of CER questions addressed in five pilot projects were:

1. The pilot projects, funded through a competitive application process, addressed a wide range of CER questions:
   - Comparative Effectiveness of Anticoagulant Prophylaxis in Obese versus Non-obese Patients Undergoing Total Knee Replacement Surgery: A Collaborative Study with the University Health System Consortium
   - Variability of Intensive Care Unit Resource Utilization in Adult Patients with Traumatic Brain Injury
   - Comparative Effectiveness of Computer Aided vs. Unaided Screening Mammography
   - Percutaneous catheter-based interventions versus open surgical bypass procedures for lower extremity atherosclerotic disease: Is there a difference in long-term outcomes?

The pilots will be completed in 2011, and we anticipate that these projects will provide the basis for applications to expand the initial research. Their findings will be presented at the CHPR noon seminar and the annual UC Davis CTSC research conference.

**3. The Methods Course**

**CER Collaborative Components**

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**Conclusion**

Collaboration, leveraging existing training programs and taking advantage of expertise both on our campus and elsewhere have been key elements for developing a group of young investigators interested in CER. We hope to network with other CTSA programs to exchange ideas and curricula for CER training. We anticipate that these collaborative efforts will contribute to a growing cohort of UC Davis researchers with skills and interest in CER.