

Needs Assessment for Comparative Effectiveness Research UCSF CTSI, 2011

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Summary

In the winter and spring of 2011 we conducted a needs assessment for comparative effectiveness research (CER) at UCSF. The needs assessment was conducted using key informant interviews with 19 investigators and an internet-based survey distributed to the UCSF CER listserv and other investigators. Four major issues emerged as barriers to investigators conducting and receiving funding for CER-related projects. These included:

- Difficulty identifying potential collaborators at UCSF
- Lack of methodologic expertise in CER, and difficulty accessing people with such expertise
- Uncertainty about funding opportunities
- Access to datasets and cohort identification and data collection tools

These barriers provide a roadmap for future CTSI-led initiatives to expand capacity for CER at UCSF. Initiatives currently being developed to address these barriers include interactive web-based tools (including an expansion of UCSF Profiles and development of CER-focused wikis), a symposium designed to facilitate collaborations and networking around CER, and efforts to direct investigators to existing resources such as CELDAC and the Participant Recruitment Service.

Full Report

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Introduction

Since the emergence of comparative effectiveness research as a priority research area, the UCSF CTSI has attempted to support CER at UCSF. Early activities included development of web-based resources on the CTSI website, a listserv which now reaches more than 250 people within and outside of UCSF, a symposium on CER held in January 2010, and a CTSI administrative supplement which supported the development of the Comparative Effectiveness Large Dataset Analysis Core (CELDAC) under the leadership of James Kahn, MD, Claire Brindis, MD, and Janet Coffman, PhD of the Philip R. Lee Institute for Health Policy Studies in collaboration with UCSF Academic Research Services.

Since the initial round of activity around CER, substantial uncertainty remains around the commitment to mechanisms for federal support for this type of research. Locally, there have also been questions around which barriers are most problematic for investigators at UCSF with an interest in CER, and how the CTSI can be most effective in helping investigators overcome these barriers.

To address these questions, we conducted a needs assessment about CER at UCSF in the winter and spring of 2011. Preliminary results of this needs assessment were presented at a meeting of the UCSF CTSI's Steering Committee for CER in April 2011.

Methods:

We conducted a needs assessment through a combination of key informant interviews and a web-based survey sent to investigators who we identified as potentially interested in comparative effectiveness research (CER).

Key informant interviews: Subjects for the key informant interviews were identified in consultation with Deborah Grady, MD (co-Director of the UCSF CTSI) and with suggestions from colleagues and early interviewees in a limited form of snowball sampling. We attempted to interview faculty from a variety of specialties and the different professional schools at UCSF, focusing on senior investigators with a wealth of experience and perspectives on CER at UCSF. We used a semi-structured format for the interviews, focusing on learning about the CER activities of the interviewee and his or her close colleagues, what the barriers are to conducting CER at UCSF, and suggestions for how best to increase capacity for conducting CER on campus. Between January and April 2011 we interviewed 19 people in 16 separate interviews.

Survey: We developed a brief internet-based survey that focused on assessing knowledge of CER activities and opportunities, barriers to conducting and funding CER projects, and inquiring about what services the CTSI could provide that would improve the respondent's ability to conduct and obtain grant funding for CER projects. Questions were initially developed by reviewing results of a nationwide needs assessment survey of CTSI leaders (as presented at the national CTSI CER Key Functioning Committee annual meeting in November 2010) and through informal discussions with research leaders at UCSF. We pilot-tested an early version of the survey with a convenience sample of 4 investigators to test clarity and solicit suggestions about content. We then invited members of the UCSF CTSI's CER listserv to complete the survey (265 people on the distribution list), and we invited an additional 35 people who were recipients of an earlier survey conducted by the UCSF Comparative Effectiveness Large Dataset Analysis Core (CELDAC). The survey was open for completion in March and early April 2011.

Results

KEY INFORMANT INTERVIEWS:

We interviewed 19 investigators from a range of disciplines, as noted in Table 1:

Table 1: Disciplines of key informants

School (#)	Department / Section / Unit (#)
School of Medicine (13)	Cardiology (1) Epidemiology and Biostatistics (3) Family Practice (1) General internal medicine / hospital medicine (5) Health Policy (2) Obstetrics and Gynecology (1) Pediatrics (2) Radiology (1)
School of Nursing (3)	--
School of Pharmacy (2)	--
Non-UCSF (3)	Kaiser Permanente Department of Research (1) San Francisco Coordinating Center (2)

* Participants with >1 major departmental / unit affiliation are listed under each affiliation

Several themes emerged from the key informant interviews on what would be most helpful for expanding capacity for CER at UCSF.

The first key theme was facilitating internal and external collaborations. Issues raised in discussing this theme included (1) developing mechanisms to help investigators learn what their colleagues are doing, so as to identify potential collaborators; (2) finding the “glue” that brings people together to form collaborative teams, for example in-person events such as seminars and symposia, and online collaborations through wikis and other such tools; and (3) identifying opportunities for mutual benefit, including working across institutions in a manner than benefits investigators at both sites.

The second key theme was promoting access to resources. Informants felt it would be useful to highlight and make available datasets that can be used for observational CER studies, and also to promote use of other research tools such as low-cost systems to facilitate subject enrollment and data collection.

The third key theme was gaining insight into and leverage with funding opportunities. Informants were clear that simply forwarding announcements for RFAs or RFPs was not particularly helpful, but that there would be substantial value in learning about the “inside scoop” on these announcements. For example, one informant suggested that wikis could be created around announcements that were posted, in which people with inside knowledge could share their insights with others. Another high-

value proposition is finding ways to connect with funders, including having a seat at the table when decisions about funding priorities are established.

SURVEY:

Invitations to complete the survey were sent to 300 subjects, including a general appeal sent to 265 investigators on the UCSF CER listserv and an additional 35 people who were not on the listserv and were directly emailed. We received 32 responses.

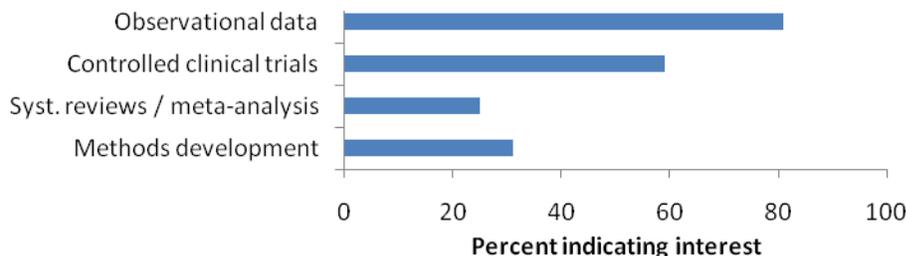
Table 2 shows characteristics of survey respondents and their current work with CER-related projects. Most respondents were Assistant and Full Professors. More than half were currently engaged in funded CER projects.

Table 2: Respondent characteristics

	% (N=32)
Appointment	
Assistant Professor	31%
Associate Professor	16%
Full Professor	37%
Other (including non-UCSF)	16%
Primary Location	
Parnassus	22%
Laurel Heights	34%
Mt Zion, Mission Bay, China Basin, SFGH, VA, Other	<=13% each
Currently doing CER?	
Yes, funded	59%
Yes, unfunded	16%
No	28%

Figure 1 shows the types of CER research for which that respondents indicated an interest (respondents were allowed to select more than one type of research). All types of research were well-represented, although studies using observational methods were most popular.

Figure 1: Interest in types of CER



Respondents showed an interest in collaboration. Ninety percent of respondents indicated a willingness to post their name and research interests on an online database of UCSF investigators interested in CER, including 59% who responded “definitely yes” and 31% who responded “probably yes.” Similarly, when

asked about various facets of their knowledge about CER, awareness of potential collaborators at UCSF and how to find them were the domains where respondents indicated the least knowledge (Figure 2).

Figure 2: Knowledge of CER topics

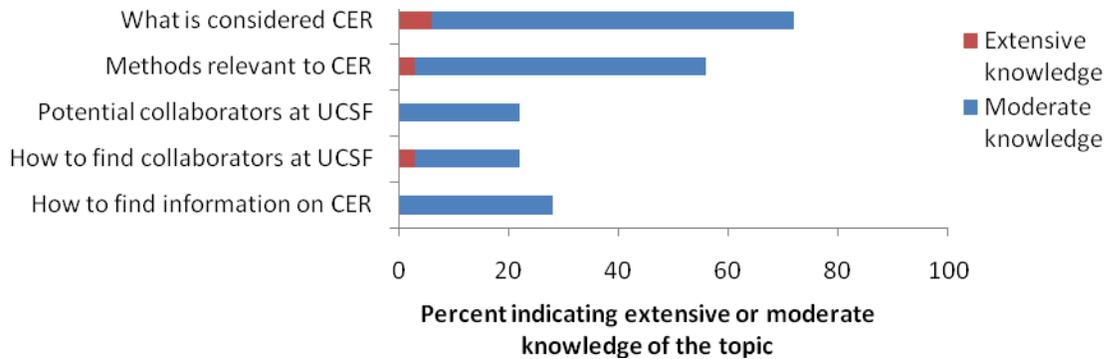
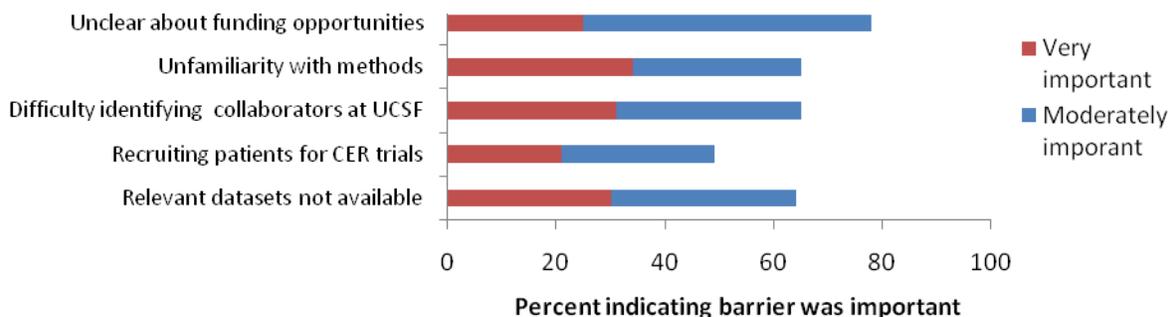


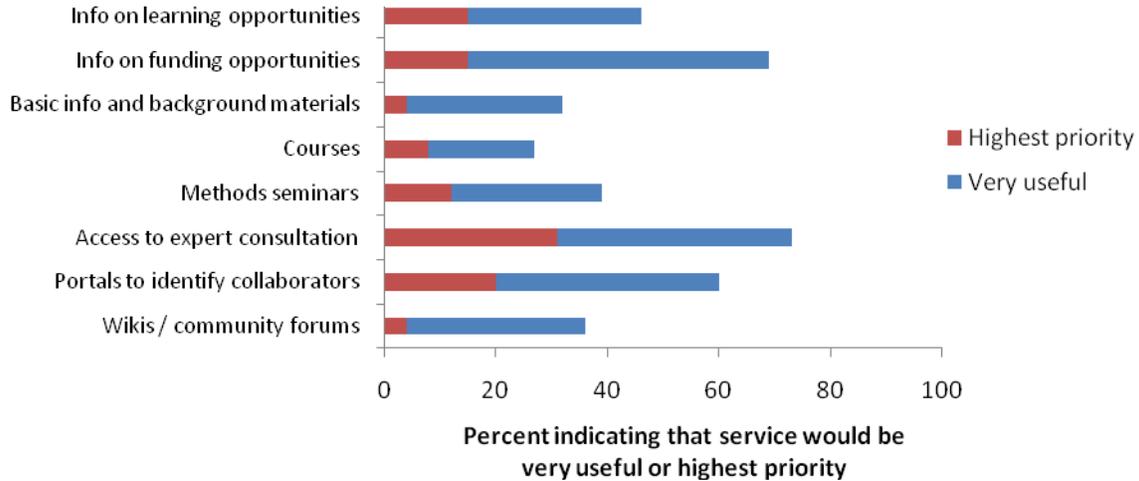
Figure 3 shows respondent ratings of different barriers to their ability to conduct and obtain grant funding for CER. Most barriers were rated as moderately or very/extremely important by a substantial majority of respondents. When asked to give open-ended responses about the most important barriers they faced, 23 of 32 respondents provided a wide variety of answers. The most frequently cited themes included challenges obtaining funding and limited time (6 responses each), needing help with methods and statistics (4 responses), and finding collaborators or mentors (4 responses).

Figure 3: Perceived barriers to ability to conduct and obtain grant funding for CER



Finally, we asked respondents which services would be most helpful to assist their CER-related research (Figure 4). While many options rated highly, the most commonly-cited requests were for information on funding opportunities, access to expert consultation, and portals to identify collaborators. Twenty respondents also provided open-ended answers to this question. The most common themes to the open-ended questions mirrored results from the Likert scale question, with 4 comments each for help identifying collaborators, and statistical help and consultation services.

Figure 4: Services that would be most helpful to assist CER-related research at UCSF



* note that graph shows only “very useful” and “highest priority” responses.

Discussion

Several lessons emerged from this two-pronged needs assessment. First, investigators perceive substantial barriers to identifying potential collaborators at UCSF, and feel that finding ways to better identify such people is an important priority. Second, on a related note a number of investigators felt they needed access to enhanced methodologic expertise (including via expert consultation). Third, nearly 80% of respondents felt unclear about funding opportunities, and there was strong interest in learning more about funding opportunities, including an “inside scoop” that goes beyond the official written language of Requests for Applications (RFAs) or Requests for Proposals (RFPs). Finally, investigators identified the need for better access to relevant research tools including observational datasets for secondary data analysis and cohort identification and data collection tools for primary data collection.

These priority needs provide a useful roadmap for programs that CTSI and other entities at UCSF can implement to expand capacity for CER on campus. A number of possibilities are listed below, several of which are being actively pursued.

1. Tools to identify potential collaborators

- a. UCSF Profiles. The UCSF Profiles system has been successful, but has been challenging for members of the CER community due to the absence of clear search terms to identify colleagues with relevant CER expertise. We have begun discussions with the Profiles leadership team about helping investigators self-identify as interested in various elements of CER, and enabling searching along these terms. This will likely occur as a pilot project as part of a rollout of an enhanced Profiles system that will give investigators greater flexibility to adjust their profiles.

- b. Wikis. It is possible through the CTSI website architecture to bring investigators together on wikis and community forums to discuss specific projects, for example a new RFA or program announcement. We are exploring this mechanism. We anticipate that the CER listserv (a passive, centrally controlled system) will alert investigators to specific projects, which they can then engage on together via wikis.
- c. Symposium. We are planning a symposium for fall 2011 which will bring together a number of partner institutions from across the Bay Area. We are providing networking opportunities as part of the structure of the symposium, with a goal of fostering collaborations within and between institutions.

2. Access to enhanced methodologic expertise

- a. Consultation Service. We are working with the CTSI Consultation Service to ensure that CER-related methodologic and statistical expertise is well-represented among their panel of experts, and to create tracking mechanisms to flag investigators as interested in CER. We hope to help direct interested investigators to this valuable resource.
- b. Wikis. As noted above, we anticipate that improving collaboration will help investigators identify colleagues with the expertise they need.

3. Learning about funding opportunities

- a. Listserv and Wikis. The CER listserv currently distributes CER-related funding announcements culled from NIH, AHRQ, and other sources. We anticipate that wikis (as described above) will provide valuable opportunities for people with “inside knowledge” to share their insights.
- b. Website. As part of a general plan to expand the UCSF CER website, we plan to add more information about specific funding opportunities and the funding landscape in general.
- c. Symposium. A key focus of the symposium planned for fall 2011 will be discussion of the current and anticipated future funding landscape.

4. Access to relevant research tools

- a. To help investigators access relevant research tools, our focus will be on raising awareness of existing resources that can serve investigators needs. These include...
- b. CELDAC. We plan to raise awareness of CELDAC, which has collected information on a series of databases (and a structure for seeking dataset-specific expertise) relevant to CER.
- c. Participant Recruitment Service. We plan to raise awareness of the PRS, which provides resources for identifying and recruiting cohorts for primary data collection studies.
- d. Integrated Data Repository. We plan to raise awareness of the IDR, which can generate information on cohorts from UCSF clinical sites and will enable access to other relevant databases

There are important limitations to this needs assessment. We attempted to reach a diverse audience of research leaders for the key informant interviews, but these interviews did not include other stakeholders such as junior investigators. Also, the response rate for the internet-based survey was low, as we expected for a voluntary survey posted on a large listserv. Thus, the answers we received may not accurately represent the needs of constituencies who were less likely to complete the survey. Nonetheless, to the extent that investigators with the greatest interest in CER were more likely to complete the survey, our results may best represent those with a strong commitment to this area of research.

In summary, the major barriers (and potential solutions) that we identified provide a useful framework for guiding the next phase of efforts to promote CER at UCSF. Once these new initiatives have been launched, follow-up work will be needed to assess their effectiveness and the extent to which they helped address the barriers we identified.