INTRODUCTION

Researchers outside the social sciences often fail to incorporate qualitative data in their analyses. To better understand the process and outcomes of each core and program in the University of Illinois at Chicago (UIC) Center for Clinical and Translational Science (CCTS), we have incorporated a mixed-methods research design to our evaluation. This poster describes the added value of qualitative data collection and analysis methods as found in our evaluation.

METHODS

i) Theoretical framework. All data collection and analyses are based on specific aims linked to logic models for each CCTS core and program, including overarching specific aims for the entire center. The logic models guide the entire evaluation process and interpretation of findings.

ii) Samples. Core group leaders, staff, service participants, stakeholders, and controls.

iii) Mixed Methods Approach

a) Goal. Triangulation of data can help improve the validity of research findings by using methods that have different strengths and weaknesses. The triangulation, or comparison of findings about similar evaluation questions, looks for consistency in the findings, in order to strengthen the findings. However, when results are inconsistent, triangulation can suggest additional areas for exploring the data.

b) Qualitative

i) Goal. To address process and implementation evaluation as CCTS cores produce intended outcomes.

ii) Data collection. Participant observation, semi-structured interviews, document review (e.g., minutes, announcements, CCTS proposal, revised specific aims, program documents)

iii) Analysis. Development of case studies for each core and program describing progress towards accomplishing specific aims, staffing, changes in plans and logic models, strengths, challenges, and lessons learned.

iv) Quantitative

i) Goal. To provide short- and long-term feedback on core and program outputs to CCTS leadership.

ii) Data collection. Web surveys, academic publication and production, “team counting” (e.g., service hours, funding allocation, event attendees, Web usage)

iii) Analysis. Development of dashboard indicators by use of descriptive and graphical summaries as well as time series analyses of trend data.

iv) Mixed Methods Analysis. Using data from all sources for each specific aim to interpret the results of both qualitative and quantitative data (see Figure 1).

RATIONAL FOR INCLUDING QUALITATIVE DATA

i) Clarification of Findings. These methods can clarify other’s results. This is particularly important when results do not make sense, are contradictory, or do not appear to be producing intended program outcomes.

a) Example: Qualitative interviews begin to clarify conflict in quantitative Regulatory Support and Advocacy Core (RSAC) results (see Figure 2).

i) Findings from the Office of the Vice Chancellor for Research about the IRBs indicate that the RSAC takes longer to IRB protocol approval (see Figure 3).

ii) However, qualitative interviews of those who have used the RSAC show they are satisfied (see Table 1). It is an example of reporting qualitative findings in a quantitative way. Responses were similar across gender and RSAC service provider.

iii) Themes from the qualitative analysis around satisfaction of RSAC services are reported below.

(1) Satisfaction with RSAC services:

a) “Excellent! Careful, diligent work in assuring that IRB forms were filled out in great detail, facilitating the implementation of our research.”

b) Very responsive. Quickness of completion was important.

c) “Satisfaction with RSAC services: The investigator was experienced in IRB submission and felt that RSAC could not add to his protocol. He expected that usual IRB barriers would be eliminated by RSAC.”

d) “RSAC services were somewhat helpful: ‘It was helpful for me to sort out the IRB process, but I ended up not moving forward on the project.’”

ii) Next steps: We will collect additional data to assist in making the best interpretation of the findings. Are there differences in research and IRB experiences, background training (MD vs. PhD), type of submission (initial, continuing, amendment, etc) and other characteristics of RSAC and non-RSAC participants?

b) Using both types of methods can address gaps in data: One type of method can provide more timely data about current activities, while another can provide long-term outcome data (such as intellectual products).

c) CCTS Example: Anticipated Gaps in Data:

Publication data will be delayed at least 3-5 years after use of CCTS services. Semi-structured interviews with CCTS users has identified examples of intermediate outcomes and planned publications.

A pilot report was not a complete way to take an overwhelming amount of data and have it analyzed in the Design and Analysis Core (DAC).

ii) The director of DAC developed a new method for analyzing this type of data, which allowed the more appropriate and helpful method for measuring alzheimer’s data.

iii) The recipent indicated that she had two minor papers developed already and that the DAC director would likely publish the method he developed.

LESSONS LEARNED

i) Increased time and resources are needed. The planning and implementation of mixed methods studies are much more complex than studies with only quantitative data.

ii) Mixed-methods studies require researchers who value the integration of qualitative and quantitative data. At least one researcher on the team needs skills and training in mixed methods.

iii) Additional research is more labor intensive. A large evaluation, like evaluating a CTSA, takes much more coordination.

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