Draft SCOPE OF WORK For STATISTICAL SUPPORT

I. Title of Service: Statistical Support for the Cardiothoracic Surgery

II. <u>Scope of Work</u>: Seeking contractor with the capability to provide all labor, supervision, transportation, management, and personnel required for statistical support to the cardiothoracic surgery service at the Michael E. DeBakey VA Medical Center (MEDVAMC), 2002 Holcombe Boulevard, Houston, Texas 77030. The services shall support the cardiothoracic clinical outcomes research at the MEDVAMC cardiovascular center of excellence. All work shall be in compliance with the herein scope of work, other terms and conditions of the contract.

III. <u>Background</u>: The vast majority of the cardiothoracic surgery research is based on the Continuous Improvement in Cardiac Surgery Program (CICSP). This is a sophisticated database with over 200 variables that require intimate knowledge of clinical correlations to handle. In addition, there are varied definitions of mortality data that depends on the type of analysis and some variables can be confused as risk factors vs. complications.

IV. Contract Type: Firm Fixed Priced

V. Contractor shall not be considered a VA employee for any purpose.

VI. Seeking Contractor with following requirements but not limited to:

1. Contractor that have completed the required mandatory training for both local and national VA research and or data security training requirements to-date and shall ensure that these are current under the IRB/R&D approval(s)/exemptions provided.

2. Contractor that have completed the mandatory training requirements include but not limited to relevant human subjects, cyber security, and privacy training.

3. Contractor with capability that can assure research and or data security staff trainings are maintained in accordance with local and national standards for the duration of the research/study/project period related to the research/study/project proposal submitted.

4. Seeking Contractor with the following Experience but not limited to:

i. Fifteen (15) years' experience in the Continuous Improvement in Cardiac Surgery Program (CICSP).

ii. Contractor that possess intimate knowledge of the variables and the proper methodology needed to analyze the data; ability to manipulate and analyze data from various data platforms (Excel, SAS, NIS).

iii. Contractor that possess the ability to take project from cradle to grave, input raw data, clean data, analyze data, write up results for manuscripts, get results published.

iv. Contractor that possess in addition to the basic statistical methods needed for any mathematical analysis shall possess GLM regression, logistic regression, survey design and analysis, propensity score matching, and survival analysis.

v. Contractor that possess the Mastery of risk adjustment methodology and propensity matching.

vi. Contractor that possess advanced knowledge of survival analysis and graphic demonstrations.

5. Contractor with the capability to perform duties shall include but limited to the followings:

- a. Interpret and summarize the data relating to cardiothoracic research projects that include but are not limited to:
 - i. VATs Project with Thoracic Surgeon
 - ii. Compile innominate artery cannulation outcomes for patients under 65
 - iii. On pump versus off pump CABG:
 - 1. Propensity match survival for intention to treat and as treated cohorts
 - 2. Secondary outcome measures for intention to treat or as treated cohorts
 - 3. Benefit of off-pump in subgroups- COPD, renal failure, CVD
- b. Edits manuscripts (especially the methods and statistical sections) for style, clarity, consistency, and organization.
- c. Ensures manuscripts meet specific journal guidelines; revises manuscripts to conform to specific style guidelines (e.g., AMA, APA, Chicago) as appropriate.
- d. Tracks and follows up on status of ongoing projects.
- e. Obtains information needed for papers, slides, and grants by performing computer literature searches, and retrieving articles.