

Monthly Program Status Report – PROJECT

Reporting Period:	July 2014
Contracting Agency:	Food and Drug Administration (FDA)
FDA Project Manager:	Jingyee Kou, jingyee.kou@fda.hhs.gov , 301-796-9495
FDA Subject Matter Expert:	Thomas Permutt, thomas.permutt@fda.hhs.gov , 301-796-1271
FDA COTR:	Shaila Shaheed, Shaila.Shaheed@fda.hhs.gov ,
Contract / Order:	HHSF223201310230C
Contractor PI:	Daniel Scharfstein, dscharf@jhsp.edu , 410-955-2420
Project Team:	Aidan McDermott (Computer Programmer)
Description of Activity:	A recent FDA-sponsored National Research Council Report recommended that "examining sensitivity to the assumptions about the missing data mechanism should be a mandatory component of reporting." While the Report outlines a framework for conducting sensitivity analysis, there are two major problems with existing methods: (1) they have not been implemented in software packages and (2) they do not adequately address non-monotone missing data patterns (i.e., patients provide data irregularly). The objective of this project is to address these gaps by: 1) creating unified and coherent methods for global sensitivity analysis of clinical trials with monotone and non-monotone missing data, 2) developing free, open source and reproducible software in SAS and R to implement the methods, and 3) demonstrating the methods and software using real clinical trial data.

Project Health Check						
Health ▶	Budget	Schedule	Resources	Deliverables		
Notes ▶	Within Budget	On Schedule	Adequate	On Target		

Budget Tracking – (TOTAL CONTRACT CEILING)							
POP	Ceiling Remaining	Cumulative Funding	Year Funding (Year 1)	Spent to Date	Year Funding Remaining	Month Invoice	Funding Covers
Base	\$1,094,565	\$1,094,565	\$1,094,565	\$301,537.75 (*\$47,175 committed)	\$793,027.24	\$209,145	Salary, fringe, other expenses, and indirect costs

Activity Summary and Highlights
Over the last month, we continued to develop C code and user-friendly documentation that can be posted online. Currently, the software (titled SAMON) runs in a Linux/Unix environment running SAS. We have used the code to analyze three datasets. We plan to have Ted Peterson (CDRH) beta test the software. We continued to work on adding data analysis and simulation sections to the manuscript. Finally, we have working on developing a methodology for analyzing studies with intermittent missing data.

Key Accomplishments	
Current Reporting Period	Planned for Next Period
<ul style="list-style-type: none"> Developed C code and user-friendly documentation. Analyzed three datasets Continued work on manuscript. Worked on methodology for intermittent missing data. 	<ul style="list-style-type: none"> Initiate the Forum option on Website Expand membership on Website Post and beta test C code Develop Windows-based version of software Develop a less computationally intensive confidence interval procedure. Finish draft of manuscript Presentation at JSM Work on methodology for intermittent missing data Identify more forums for short courses

Issues and Risks					
Category	Priority	Status	Opened	Issue	Description
Contract (FDA)	1	Closed	9/30/13	Intellectual Property	Revision to contract regarding intellectual property language.
Dissemination (FDA)	2	Closed	2/15/14	Website	FDA Personnel cannot connect to www.missingdatamatters.org from their office computers.
Software (JHU)	1	Closed	3/15/14	Coverage of Confidence Intervals	Simulations indicate that standard procedures for constructing confidence intervals are not providing adequate coverage with typical sample sizes.
Computing (JHU)	1	Closed	4/21/14	Periods of slow performance of computing cluster	A new computing cluster was installed at Johns Hopkins. We are experiencing periods of slow performance on the cluster.
Personnel (JHU)	1	Closed	5/21/14	Re-Distribution of Effort	Starting April 1, Aidan McDermott has reduced his percent effort by 20%. Chenguang Wang joined the project starting July 15.
Invoicing (FDA)	1	Open	6/6/14	Payment of Invoices	Invoices have not been paid.
Computing (FDA)	1	Open	6/6/14	Software on FDA Cluster	Investigate the steps needed to run software on FDA cluster

Other Activities
<ul style="list-style-type: none">•

Attachments and References
<ul style="list-style-type: none">•