Dataset Integrity Check for Multidisciplinary Approach to the Study of Pelvic Pain (MAPP) Study – Full Data

> Prepared by NIDDK-CR June 23, 2022

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### **1 Standard Disclaimer**

The intent of this DSIC is to provide confidence that the data distributed by the NIDDK repository is a true copy of the study data. Our intent is not to assess the integrity of the statistical analyses reported by study investigators. As with all statistical analyses of complex datasets, complete replication of a set of statistical results should not be expected in secondary analysis. This occurs for a number of reasons including differences in the handling of missing data, restrictions on cases included in samples for a particular analysis, software coding used to define complex variables, etc. Experience suggests that most discrepancies can ordinarily be resolved by consultation with the study data coordinating center (DCC), however this process is labor-intensive for both DCC and Repository staff. It is thus not our policy to resolve every discrepancy that is observed in an integrity check. Specifically, we do not attempt to complex analyses, unless NIDDK Repository staff suspect that the observed discrepancy suggests that the dataset may have been corrupted in storage, transmission, or processing by repository staff. We do, however, document in footnotes to the integrity check those instances in which our secondary analyses produced results that were not fully consistent with those reported in the target publication.

## 2 Study Background

The Multidisciplinary Approach to the Study of Chronic Pelvic Pain (MAPP) Research Network was established to focus on a broader approach to the study of Interstitial Cystitis (IC)/Painful Bladder Syndrome (PBS) in men and women, and Chronic Prostatitis (CP)/Chronic Pelvic Pain Syndrome (CPPS) in men. Participants with some form or symptoms of IC or CP were asked to join the Trans-MAPP Epidemiology and Phenotyping (EP) Study. Participants with no Urologic Pelvic Pain Syndromes as well as participants with specific conditions (Fibromyalgia (FM), Irritable Bowel Syndrome (IBS), Chronic Fatigue Syndrome (CFS)) were recruited for the Trans-MAPP Control Study. These participants were a reference/control group for the Trans-MAPP Epidemiology & Phenotyping (EP) Study.

## **3** Archived Datasets

All data files, as provided by the Data Coordinating Center (DCC), are located in the MAPP folder in the data package. For this replication, variables were taken from the "mapp\_i\_xsectional.sas7bdat" dataset.

## **4 Statistical Methods**

Analyses were performed to replicate results for the data published by Afari et al. [1]. To verify the integrity of the data, only descriptive statistics were computed.

### **5** Results

For Table 1 in the publication [1], <u>Demographic characteristics of participants with urologic chronic</u> <u>pelvic pain syndrome (UCPPS), healthy controls (HC), and non-urological chronic overlapping pain</u> <u>conditions (COPC)</u>, Table A lists the variables that were used in the replication, and Table B compares the results calculated from the archived data files to the results published in Table 1. The results of the replication are an exact match to the values in Table 1.

### **6** Conclusions

The NIDDK Central Repository is confident that the MAPP data files to be distributed are a true copy of the study data as the results of the replication are an exact match to the published results.

#### **7** References

[1] Afari N, Buchwald D, Clauw D, Hong B, Hou X, Krieger JN, Mullins C, Stephens-Shields AJ, Gasperi M, Williams DA. A MAPP Network Case-control Study of Urological Chronic Pelvic Pain Compared With Nonurological Pain Conditions. The Clinical Journal of Pain, 36(1), 8-15, January 2020. doi: https://doi.org/10.1097/AJP.00000000000769 **Table A:** Variables used to replicate Table 1 – Demographic characteristics of participants with urologic chronic pelvic pain syndrome (UCPPS), healthy controls (HC), and non-urological chronic overlapping pain conditions (COPC)

Table Variable	dataset.variable					
Age in years	mapp_i_xsectional.age					
	mapp_i_xsectional.cohorttype					
Gender	mapp_i_xsectional.sex					
	mapp_i_xsectional.cohorttype					
Race	mapp_i_xsectional.racecat					
	mapp_i_xsectional.cohorttype					
Ethnicity	mapp_i_xsectional.ethnicity					
	mapp_i_xsectional.cohorttype					
Employment	mapp_i_xsectional.emp_status					
	mapp_i_xsectional.cohorttype					
Education	mapp_i_xsectional.education					
	mapp_i_xsectional.cohorttype					

	UCPPS	UCPPS DSIC	Diff.	HC	HC DSIC	Diff.	СОРС	COPC DSIC	Diff.
	(n=424)	(n=424)	(n=0)	(n=415)	(n=415)	(n=0)	(n=200)	(n=200)	(n=0)
Age in years, mean (SD)	43.4 (15.1)	43.4 (15.1)	0 (0)	40.5 (14.1)	40.5 (14.1)	0 (0)	41.7 (13.7)	41.7 (13.7)	0 (0)
Gender									
Male	191 (45.0)	191 (45.0)	0 (0)	182 (43.9)	182 (43.9)	0 (0)	44 (22.0)	44 (22.0)	0 (0)
Female	233 (55.0)	233 (55.0)	0 (0)	233 (56.1)	233 (56.1)	0 (0)	156 (78.0)	156 (78.0)	0 (0)
Race									
White	374 (88.2)	374 (88.2)	0 (0)	316 (76.1)	316 (76.1)	0 (0)	150 (75.0)	150 (75.0)	0 (0)
Black	16 (3.8)	16 (3.8)	0 (0)	48 (11.6)	48 (11.6)	0 (0)	22 (11.0)	22 (11.0)	0 (0)
Other	34 (8.0)	34 (8.0)	0 (0)	51 (12.3)	51 (12.3)	0 (0)	28 (14.0)	28 (14.0)	0 (0)
Ethnicity									
Hispanic	28 (6.6)	28 (6.6)	0 (0)	35 (8.4)	35 (8.4)	0 (0)	13 (6.5)	13 (6.5)	0 (0)
Non-Hispanic	395 (93.2)	395 (93.2)	0 (0)	380 (91.6)	380 (91.6)	0 (0)	186 (93.0)	186 (93.0)	0 (0)
Unknown	1 (0.2)	1 (0.2)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0.5)	1 (0.5)	0 (0)
Employment									
Employed	278 (65.6)	278 (65.6)	0 (0)	294 (70.8)	294 (70.8)	0 (0)	116 (58.0)	116 (58.0)	0 (0)
Unemployed	58 (13.7)	58 (13.7)	0 (0)	86 (20.7)	86 (20.7)	0 (0)	42 (21.0)	42 (21.0)	0 (0)
Retired	43 (10.1)	43 (10.1)	0 (0)	27 (6.5)	27 (6.5)	0 (0)	8 (4.0)	8 (4.0)	0 (0)
Homemaker	12 (2.8)	12 (2.8)	0 (0)	7 (1.7)	7 (1.7)	0 (0)	7 (3.5)	7 (3.5)	0 (0)
Disabled	32 (7.5)	32 (7.5)	0 (0)	0 (0)	0 (0)	0 (0)	25 (12.5)	25 (12.5)	0 (0)
Education									
< High School	0 (0)	0 (0)	0 (0)	2 (0.5)	2 (0.5)	0 (0)	1 (0.5)	1 (0.5)	0 (0)
High School or GED	31 (7.3)	31 (7.3)	0 (0)	27 (6.5)	27 (6.5)	0 (0)	9 (4.5)	9 (4.5)	0 (0)
Some College	118 (27.8)	118 (27.8)	0 (0)	115 (27.7)	115 (27.7)	0 (0)	66 (33.0)	66 (33.0)	0 (0)
College Graduate	163 (38.4)	163 (38.4)	0 (0)	154 (37.1)	154 (37.1)	0 (0)	72 (36.0)	72 (36.0)	0 (0)
Professional or Graduate Degree	112 (26.4)	112 (26.4)	0 (0)	117 (28.2)	117 (28.2)	0 (0)	52 (26.0)	52 (26.0)	0 (0)

**Table B:** Comparison of values computed in integrity check to reference article Table 1 values

#### **Attachment A: SAS Code**

libname old "X:\NIDDK\niddk-dr\_studies3\private\_created\_data\MAPP\_V2\Data"; libname new "X:\NIDDK\new\_data\_packages\_received\MAPP\private\_orig\_data\mapp\_i\_niddk\_22dec2020";

data xsect; set new.mapp\_i\_xsectional;
run;

proc contents data=xsect;
run;

\*Number of participants in each cohort; proc freq data=xsect; tables cohorttype; run;

\*Age by cohort; proc sort data=xsect; by cohorttype; run;

proc means data=xsect n mean std; var age; by cohorttype; run;

\*Gender by cohort type; proc freq data=xsect; tables sex\*cohorttype/norow nopercent; run;

\*Race by cohort type; data xsect1; set xsect; if racecat = 1 then racecat1 = 1; if racecat = 2 then racecat1 = 2; if racecat >= 3 then racecat1 = 3; run;

proc freq data=xsect1; tables racecat1\*cohorttype/norow nopercent; run; \*ethnicity by cohort type; proc freq data=xsect; tables ethnicity\*cohorttype/missing norow nopercent; run;

\*Employment by cohort type; proc freq data=xsect; tables emp\_status\*cohorttype/missing norow nopercent; run;

\*Education by cohort type; proc freq data=xsect; tables education\*cohorttype/missing norow nopercent; run;