

JASA ACS Reproducibility Initiative - Author Contributions Checklist Form

The purpose of the Author Contributions Checklist (ACC) Form is to document the code and data supporting a manuscript, and describe how to reproduce its main results.

As of Sept. 1, 2016, the ACC Form must be included with all new submissions to JASA ACS.

This document is the initial version of the template that will be provided to authors. The JASA Associate Editors for Reproducibility will update this document with more detailed instructions and information about best practices for many of the listed requirements over time.

Data

Abstract (Mandatory)

We use a dataset created from the National Health and Nutrition Examination Survey (NHANES) 2013-2014.

Availability (Mandatory)

The dataset is publicly available, and the subset we use is included in the R package CrossScreening available on CRAN.

Description (Mandatory if data available)

NHANES is a publicly available dataset.

Link to data:

<https://wwwn.cdc.gov/nchs/nhanes/continuousnhanes/default.aspx?BeginYear=2013>

File format: The dataset we use can be directly read in R after the package is installed.

Code

Abstract (Mandatory)

We implement the Cross-screening method described in the submitted manuscript in R.

Description (Mandatory)

How delivered: R package publicly available on CRAN.

Licensing information: GPL-2

Version information: R package version 0.1.1

Optional Information (complete as necessary)

Instructions for Use

Reproducibility (Mandatory)

Table 1 and Table 5 can be reproduced from the CrossScreening package. After installing the package and loading it to R, for Table 1 run

```
"example(cross.screen.fg)"
```

Note that this only reproduces the $\Gamma=9$ block in the table. For other blocks, just change 9 in the example to other values.

Table 5 can be reproduced by calling an internal function

```
"CrossScreening:::table5(no.sims = 1)"
```

Since Table 5 is a simulation result with 10000 simulations, it will take a long time and a lot of CPU resources to reproduce the entire table.

Replication (Optional)

The R package can be easily used for other applications. Instructions and examples are provided in the package manual and vignette.