



Public Externalities of Universal Health Care Access

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This review verifies the reproducibility of the exhibits included in the paper "*Public Externalities of Universal Health Care Access*".

Contents in this review:

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Main findings

- **Every exhibit in the main section of the paper and 10 randomly selected exhibits in the appendix were reproduced accurately.**
- The code was successfully executed on a new computer after:
 1. Updating the working directory in line 29 of the do-file "main.do"
- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.
- The code takes approximately 20 minutes to run.
- We conducted our reproducibility analysis based on the paper shared by the authors.
- **Verification Process and Data Handling:**
 - The reproducibility package relies on two types of data: open and restricted data (available only from the data owners).
 - Open data is included in the public reproducibility package.
 - Reviewers used restricted data provided directly by the authors to conduct the reproducibility verification, and this is not included in the public reproducibility package.
 - *data_hash_report.csv* lists the SHA256 hashes of all files in the Data folder to support data integrity checks. Users who acquire the forthcoming/accessible/limited-access/restricted data can use this file to verify that the data has not been altered.
- **Reproducibility Summary:**
 - **Data:** Some data is restricted and has not been included in the reproducibility package. For more details, please refer to the README file.

- **Code:** All code files (from cleaning to analysis) are included in the reproducibility package.
- **Outputs:** All outputs are generated by code included in the reproducibility package.
- **Dependencies environment:** The reviewers created a new environment using the latest versions of dependencies available at the moment of the review.

List of exhibits and reproducibility status

Results in the Main Section of the Paper

- **Figure 1** Reproduced.
- **Figure 2** Reproduced.
- **Figure 3** Reproduced.
- **Figure 4** Reproduced.
- **Figure 5** Reproduced.
- **Figure 6** Reproduced.
- **Table 1** Reproduced.
- **Table 2** Reproduced.
- **Table 3** Reproduced.
- **Table 4** Reproduced.
- **Table 5** Reproduced.
- **Table 6** Reproduced.
- **Table 7** Reproduced.
- **Table 8** Reproduced.
- **Table 9** Reproduced.

Results in the Annex

For the Appendix, we did not review every exhibit. Instead, we randomly selected 10 exhibits from the remaining datasets to assess the appendix. Our review was based on those 10 exhibits. Since they were chosen randomly, we are operating under the assumption that if all randomly selected exhibits are reproducible, then the rest should be as well. The seed used to generate the random selection was 468568, the Stata version used was 19.5 MP, and the exhibits selected were: Figure A5, Figure A6, Figure A7, Table B1, Table B3, Figure C1, Figure C2, Figure C4, Table D3 and Table E1.

- **Figure A5** Reproduced.
- **Figure A6** Reproduced.

- **Figure A7** Reproduced.
- **Table B1** Reproduced.
- **Table B3** Reproduced.
- **Figure C1** Reproduced.
- **Figure C2** Reproduced.
- **Figure C4** Reproduced.
- **Table D3** Reproduced.
- **Table E1** Reproduced.

Reproduction Environment

Paper exhibits were reproduced on a computer with the following specifications:

- OS: Windows 11 Enterprise
- Processor: INTEL(R) XEON(R) GOLD 6226R CPU @ 2.90GHz (2 processors)
- Memory available: 16 GB
- Software version: Stata 19.5 MP