Materials Design Analysis Reporting (MDAR) Checklist for Authors

The MDAR framework establishes a minimum set of requirements in transparent reporting applicable to studies in the life sciences (see Statement of Task: doi:10.31222/osf.io/9sm4x.). The MDAR checklist is a tool for authors, editors and others seeking to adopt the MDAR framework for transparent reporting in manuscripts and other outputs. Please refer to the MDAR Elaboration Document for additional context for the MDAR framework.

Materials

Antibodies	Yes (indicate where provided: section/paragraph)	n/a
For commercial reagents, provide supplier name, catalogue number and RRID, if available.		n/a

Cell materials	Yes (indicate where provided: section/paragraph)	n/a
Cell lines: Provide species information, strain. Provide accession number in repository **OR** supplier name, catalog number, clone number, **OR** RRID		n/a
Primary cultures: Provide species, strain, sex of origin, genetic modification status.		n/a

Experimental animals	Yes (indicate where provided: section/paragraph)	n/a
Laboratory animals: Provide species, strain, sex, age, genetic modification status. Provide accession number in repository **OR** supplier name, catalog number, clone number, **OR** RRID		n/a
Animal observed in or captured from the field: Provide species, sex and age where possible		n/a
Model organisms: Provide Accession number in repository (where relevant) **OR** RRID		n/a

Plants and microbes	Yes (indicate where provided: section/paragraph)	n/a
Plants: provide species and strain, unique accession number if available, and source (including location for collected wild specimens)		n/a
Microbes: provide species and strain, unique accession number if available, and source		n/a

Human research participants	Yes (indicate where provided: section/paragraph)	n/a
Identify authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		n/a
Provide statement confirming informed consent obtained from study participants.		n/a
Report on age and sex for all study participants.		n/a

Design

Study protocol	Yes (indicate where provided: section/paragraph)	n/a
For clinical trials, provide the trial registration number **OR** cite DOI in manuscript.		n/a

Laboratory protocol	Yes (indicate where provided: section/paragraph)	n/a
Provide DOI or other citation details if detailed step-by-step protocols are available.		n/a

Experimental study design (statistics details)	Yes (indicate where provided: section/paragraph)	n/a
State whether and how the following have been done**, or** if they were not carried out.		
Sample size determination		n/a
Randomisation		n/a
Blinding		n/a
Inclusion/exclusion criteria		n/a

Sample definition and in-laboratory replication	Yes (indicate where provided: section/paragraph)	n/a
State number of times the experiment was replicated in laboratory		n/a
Define whether data describe technical or biological replicates		n/a

Ethics	Yes (indicate where provided: section/paragraph)	n/a
Studies involving human participants: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		n/a
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		n/a
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.		n/a

Dual Use Research of Concern (DURC)	Yes (indicate where provided: section/paragraph)	n/a
If study is subject to dual use research of concern, state the authority granting approval and reference number for the regulatory approval		n/a

Analysis

Attrition	Yes (indicate where provided: section/paragraph)	n/a
State if sample or data point from the analysis is excluded, and whether the criteria for exclusion were determined and specified in advance.	837 out of the 905 health facilities covered by SPA survey were considered in our analysis. The remaining 68 facilities were excluded due to missing data. Please refer in Units of Analysis sub-section in Methods Section (Page 6, Line 151-160).	

Statistics	Yes (indicate where provided: section/paragraph)	n/a
Describe statistical tests used and justify choice of tests.	- There are two competing techniques to estimate technical efficiency scores: DEA and SFA. We chose SFA because it allows to consider stochastic errors and facility heterogeneity in health production models (Please refer on Page 3, Line 75-78 in the Background Section – Last Paragraph) - The Cobb-Douglas (CD) and Translog (TL) functional forms are widely used to model health care production. We employed a generalized maximum likelihood-ratio test to select which functional form best fits the data (Please refer on page 5, Line 107 to 110 in the theoretical sub-section of the Methods Section). - The technical inefficiency factor, u_i, in the health production model usually assumed to have a half-normal, exponential-normal, and truncated normal distribution. We used the Akaike's Information Criterion (AIC) and the Bayesian Information Criterion (BIC) to select the most appropriate distribution (Please refer the theoretical sub-section in the Methods Section, on Page 5, Line 110 - 113).	

Data Availability	Yes (indicate where provided: section/paragraph)	n/a
State whether newly created datasets are available, including protocols for access or restriction on access.	The data source is described in the Methods section (Page 6, Line 141-1149). The SPA dataset is owned by the Demographic and Health Survey (DHS) program. Users can request the DHS program for access and the detailed access instruction is available at https://dhsprogram.com/data/Access-Instructions.cfm	
If data are publicly available, provide accession number in repository or DOI or URL.	Though it is publicly accessible, registration is required and the detailed access instruction is available at https://dhsprogram.com/data/Access-Instructions.cfm The specific dataset file we used is the Facility Recode with a file name HTFC6AFLSR.DTA which is listed at https://dhsprogram.com/data/dataset/Haiti_SPA_2013.cfm?flag=0	
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.	Though it is publicly accessible, registration is required and the detailed access instruction is available at https://dhsprogram.com/data/Access-Instructions.cfm The specific dataset file we used is the Facility Recode with a file name HTFC6AFLSR.DTA which is listed at https://dhsprogram.com/data/dataset/Haiti_SPA_2013.cfm?flag=0	

Code Availability	Yes (indicate where provided: section/paragraph)	n/a
For all newly generated code and software essential for replicating the main findings of the study:		

State whether the code or software is available.	We used STATA® version 15.1, a proprietary statistical software by StataCorp (https://www.stata.com/). We are happy to share the data management and analysis code (Stata dofile) so that anyone who have access to the dataset and wants to replicate our analysis can do so. Attached with a file name Haiti_TEA_Data_Mgt_&_Analysis_Code_Submitted	
If code is publicly available, provide accession number in repository, or DOI or URL.		

Reporting

Adherence to community standards	**Yes (indicate where provided: section/paragraph)**	**n/a**
MDAR framework recommends adoption of discipline-specific guidelines, established and endorsed through community initiatives. Journals have their own policy about requiring specific guidelines and recommendations to complement MDAR.		
State if relevant guidelines (eg., ICMJE, MIBBI, ARRIVE) have been followed, and whether a checklist (eg., CONSORT, PRISMA, ARRIVE) is provided with the manuscript.	ICMJE guidelines were followed, as the journal follows ICMJE recommendations for publication.	

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