nature medicine

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Table 1 The MI-CLAIM checklist

From: Minimum information about clinical artificial intelligence modeling: the MI-CLAIM checklist

Before paper submission					
Study design (Part 1)	Completed: page number		Notes if not completed		
The clinical problem in which the model will be employed is clearly detailed in the paper.		Pı			
The research question is clearly stated.	d	Pı			
The characteristics of the cohorts (training and test sets) are detailed in the text.			No train-test Split		
The cohorts (training and test sets) are shown to be representative of real-world clinical settings.			No, real-vord clinical settings		
The state-of-the-art solution used as a baseline for comparison has been identified and detailed.			No, a specific solution is not identified.		

Before paper submission			
Study design (Part 1)	Completed: page number		Notes if not completed
Data and optimization (Parts 2, 3)	Completed: page number		Notes if not completed
The origin of the data is described and the original format is detailed in the paper.		PI	
Transformations of the data before it is applied to the proposed model are described.	¥	P1-2	
The independence between training and test sets has been proven in the paper.			no train, test sets
Details on the models that were evaluated and the code developed to select the best model are provided.	¥	P2, P4	
Is the input data type structured or unstructured?	☑ Structured □ Unstructured		
Model performance (Part 4)	Completed: page number		Notes if not completed
The primary metric selected to evaluate algorithm performance (e.g., AUC, F-score, etc.), including the justification for selection, has been clearly stated.	M	? 3	

Before paper submission					
Study design (Part 1)	Completed: page number		Notes if not completed		
The primary metric selected to evaluate the clinical utility of the model (e.g., PPV, NNT, etc.), including the justification for selection, has been clearly stated.			Not involve in a clinical assessment		
The performance comparison between baseline and proposed model is presented with the appropriate statistical significance.			Not provide a quantitative Cumparison		
Model examination (Part 5)	Completed: page number		Notes if not completed		
Examination technique 1 ^a		P3			
Examination technique 2 ^a		Pz			
A discussion of the relevance of the examination results with respect to model/algorithm performance is presented.		P3			
A discussion of the feasibility and significance of model interpretability at the case level if examination methods are uninterpretable is presented.			Not explicitly discussed		
A discussion of the reliability and robustness of the model as the underlying data distribution shifts is included.			Not explicitly discussed		

Before paper submission					
Study design (Part 1)	Completed: page number		Notes if not completed		
Reproducibility (Part 6): choose appropriate tier of transparency			Notes		
Tier 1: complete sharing of the code		A			
Tier 2: allow a third party to evaluate the code for accuracy/fairness; share the results of this evaluation					
Tier 3: release of a virtual machine (binary) for running the code on new data without sharing its details					
Tier 4: no sharing					

PPV, positive predictive value; NNT, numbers needed to treat.

^aCommon examination approaches based on study type: for studies involving exclusively structured data, coefficients and sensitivity analysis are often appropriate; for studies involving unstructured data in the domains of image analysis or natural language processing, saliency maps (or equivalents) and sensitivity analyses are often appropriate.

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