

Towards Complete and Accurate Reporting of Studies of Diagnostic Accuracy: the STARD Initiative*

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Objective. To improve the accuracy and completeness of reporting of studies of diagnostic accuracy in order to allow readers to assess the potential for bias in a study and to evaluate the generalizability of its results.

Methods. The Standards for Reporting of Diagnostic Accuracy (STARD) steering committee searched the literature to identify publications on the appropriate conduct and reporting of diagnostic studies and extracted potential items into an extensive list. Researchers, editors, and members of professional organizations shortened this list during a 2-day consensus meeting with the goal of developing a checklist and a generic flow diagram for studies of diagnostic accuracy.

Results. The search for published guidelines about diagnostic research yielded 33 previously published checklists, from which we extracted a list of 75 potential items. At the consensus meeting, participants shortened the list to a 25-item checklist, by using evidence whenever available. A prototype of a flow diagram provides information about the method of recruitment of patients, the order of test execution and the numbers of patients undergoing the test under evaluation, the reference standard, or both.

Conclusions. Evaluation of research depends on complete and accurate reporting. If medical journals adopt the checklist and the flow diagram, the quality of reporting of studies of diagnostic accuracy should improve to the advantage of clinicians, researchers, reviewers, journals, and the public.