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A Reporting Tool for Practice Guidelines in Health Care: The RIGHT Statement

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The quality of reporting practice guidelines is often poor, and there is no widely accepted guidance or standards for such reporting in health care. The international RIGHT (Reporting Items for practice Guidelines in HealThcare) Working Group was established to address this gap. The group followed an existing framework for developing guidelines for health research reporting and the EQUATOR (Enhancing the QUAlity and Transparency Of health Research) Network approach. It developed a checklist and an explanation and elaboration statement. The RIGHT checklist includes 22 items that are considered essential for good reporting of practice guidelines: basic information (items 1 to 4), background (items 5 to 9), evidence (items 10 to 12), recommendations (items 13 to 15), review and quality assurance (items 16 and 17), funding and declaration and management of interests (items 18 and 19), and other information (items 20 to 22). The RIGHT checklist can assist developers in reporting guidelines, support journal editors and peer reviewers when considering guideline reports, and help health care practitioners understand and implement a guideline.

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Clear, explicit, and transparent practice guidelines enable health care practitioners, health administrators, program managers, and the public to understand and implement recommendations that may positively affect patients and various populations (1). However, the quality of reporting practice guidelines seems to be low (2) and current tools to address this problem are outdated or narrow or combine reporting and quality assessment in a single instrument. The Conference on Guideline Standardization published a checklist for reporting clinical practice guidelines (last updated in 2003) that focuses mainly on clinical medicine and thus may not be directly applicable to public health or to other types of guidelines (3). The AGREE (Appraisal of Guidelines for REsearch and Evaluation) instrument was developed for both quality assessment and reporting, although it is widely regarded as an evaluation tool (4, 5). Multifunction tools may not be optimal and must be distinguished from tools that address reporting and those that assess methodological quality because they differ in purpose, structure, and content (6). Recently, the AGREE Next Steps Consortium published the AGREE reporting checklist based on the AGREE instrument (7, 8); however, this checklist is limited to items derived from the original tool, was developed by a small group of researchers, and does not provide a detailed explanation or guidance about how to use it.

Development of the Checklist

A multidisciplinary international team that included policymakers, methodologists, epidemiologists, clinicians, editors, and consumer representatives from 12 countries across Asia, Africa, Europe, Oceania, and North America was established in 2013. It aimed to develop a tool—the RIGHT (Reporting Items for practice Guidelines in HealThcare) checklist—focusing on the essential items for reporting guidelines. Development of this checklist followed the framework for health research reporting guidelines (9). We registered the project in the EQUATOR (Enhancing the QUAlity and Transparency Of health Research) Library (10). The RIGHT Working Group drafted the project proposal, generated suggested items, recruited Delphi panelists, designed the questionnaires for the Delphi survey, and drafted the final report. The Delphi group reviewed the proposal, participated in 3 rounds of Delphi surveys, came to consensus on the items included in the final checklist, and reviewed the final manuscript.

The RIGHT Working Group implemented a 4-step approach to generate potential items for the checklist. First, the group reviewed 10 representative reporting guidelines highlighted in the EQUATOR Library to determine how they generated potential items (11). These guidelines encompassed a wide variety of reporting tools, including those for randomized, controlled trials; diagnostic studies; observational studies; animal research; economic evaluation; and systematic reviews. One tool generated items based on a systematic review (12), whereas the others used surveys, group meetings, literature reviews, or combined approaches (13–21). Second, we conducted a comprehensive search of handbooks and other documents to identify standards or tools for guideline reporting (**Appendix 3**, **Appendix Figure**, and **Appendix Table**, available at www.annals

See also:

Web-Only

Supplement

.org). Third, 2 subgroups, each with 2 experienced investigators, independently extracted potential checklist items from all documents identified in the first 2 steps. Last, the whole group held a face-to-face meeting to aggregate all potential items and remove duplicates. After further discussion, 48 items were included in the initial list of potential items. Readers can obtain the search results and initial list of items from the RIGHT Web site (22).

For the Delphi survey, we recruited 17 persons with experience in the development of practice or reporting guidelines. These individuals encompassed a broad range of disciplines and diverse geographic representation. The Delphi technique followed the recommendations of Murphy and colleagues (23) and Sinha and coworkers (24) and included 3 rounds of e-mail–based surveys. Panelists rated each item on a scale of 1 (not important) to 5 (very important), suggested new items, and provided comments that were circulated in subsequent rounds. All panelists were asked to disclose any conflicts of interest before beginning the Delphi survey. The response rate was 100% for all 3 rounds of the Delphi process.

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CHECKLIST DESCRIPTION

The RIGHT checklist consists of 22 items that we consider essential for good reporting of practice guidelines (**Table**). These items encompass the following domains: basic information (items 1 to 4), background (items 5 to 9), evidence (items 10 to 12), recommendations (items 13 to 15), review and quality assurance (items 16 and 17), funding and declaration and management of interests (items 18 and 19), and other information (items 20 to 22). The RIGHT explanation and elaboration statement (**Supplement**, available at www.annals.org) provides readers with a comprehensive explanation and rationale, as well as examples of good reporting for each item in the checklist.

DISCUSSION

The RIGHT checklist can assist guideline developers in reporting guidelines, support journal editors and peer reviewers when considering guideline reports, and help health care practitioners understand and implement a guideline. The checklist is useful for clinical practice guidelines and persons in public health and other health care fields. It provides users and evaluators a clear, explicit description of the processes and procedures used to develop a guideline and access to the evidence used to formulate each recommendation.

The RIGHT checklist does not prescribe a specific format for reporting guidelines. Rather, each item should be clearly presented and sufficiently detailed somewhere in the guideline. For each item, order and format depend on the developer's preferences; publication style; and most important, the end users' needs. We recommend against deriving a score from the checklist: the items may not be equally weighted, and scores have been shown to be problematic in research synthesis (25, 26).

We emphasize that the RIGHT checklist was not developed as a tool for assessing the quality of published practice guidelines—those tools, such as the AGREE instrument (27) and others (28), exist elsewhere. Rather, the RIGHT checklist is intended to complement those tools. It also was not created as guidance for developing guidelines. Many handbooks exist for this purpose, along with the Guidelines International Network–McMaster Guideline Development Checklist, a practical tool for guideline development supported by learning resources (29). Readers should carefully select a tool according to their specific needs.

The RIGHT checklist differs from the new AGREE reporting checklist (8) in several important ways. First, the structure of the AGREE reporting checklist follows the domains of AGREE II in scope and purpose, stakeholder involvement, rigor of development, clarity of presentation, applicability, and editorial independence. In contrast, the RIGHT checklist emulates the approach used by other reporting guidance statements, such as CONSORT (Consolidated Standards of Reporting Trials) (15) and PRISMA (Preferred Reporting Items for Systematic reviews and Meta-Analyses) (13), and orders items as the developer and reader would encounter them. For example, the RIGHT checklist starts with the title, then the executive summary. Second, it includes important items that were not contained in the AGREE reporting checklist and should be reported in a guideline: quality assurance, access, suggestions for further research, and limitations of the guideline. The RIGHT checklist highlights the importance of reporting PICO (population, intervention, comparator, outcomes) questions and the quality of the body of evidence and includes 7 subitems on the formulation of recommendations from evidence. Finally, the RIGHT explanation and elaboration statement (**Supplement**) provides detailed information and examples, which the AGREE reporting tool lacks.

Endorsement and implementation of reporting guidelines may help reduce wasteful research and increase the potential effect of research on health (30). We plan to use many approaches to promote the RIGHT checklist, such as asking authors of international guideline handbooks to add the checklist to new versions of their handbooks, contacting the editors of the core clinical journals in MEDLINE (www.nlm.nih.gov/bsd/aim.html) to elicit their support and encourage them to endorse the checklist, and informing guideline developers at international and national agencies and professional societies about the RIGHT project.

We followed an explicit, transparent, and documented process for developing the RIGHT checklist and provide an accompanying explanation and elaboration statement (**Supplement**). Persons from key international organizations and institutions that focus on development and implementation of guidelines

Table. RIGHT Checklist

Section/Topic	Number	Item
Basic information		
Title/subtitle	1a	Identify the report as a guideline, that is, with "guideline(s)" or "recommendation(s)" in the title.
	1b	Describe the year of publication of the guideline.
	1c	Describe the focus of the guideline, such as screening, diagnosis, treatment, management, prevention, or others.
Executive summary	2	Provide a summary of the recommendations contained in the guideline.
Abbreviations and acronyms	3	Define new or key terms, and provide a list of abbreviations and acronyms if applicable.
Corresponding developer	4	Identify at least 1 corresponding developer or author who can be contacted about the guideline.
Background		
Brief description of the health problem(s)	5	Describe the basic epidemiology of the problem, such as the prevalence/incidence, morbidity, mortality, and burden (including financial) resulting from the problem.
Aim(s) of the guideline and specific objectives	6	Describe the aim(s) of the guideline and specific objectives, such as improvements in health indicators (e.g., mortality and disease prevalence), quality of life, or cost savings.
Target population(s)	7a	Describe the primary population(s) that is affected by the recommendation(s) in the guideline.
	7b	Describe any subgroups that are given special consideration in the guideline.
End users and settings	8a	Describe the intended primary users of the guideline (such as primary care providers, clinical specialists, public health practitioners, program managers, and policymakers) and other potential users of the guideline.
	8b	Describe the setting(s) for which the guideline is intended, such as primary care, low- and middle-income countries, or inpatient facilities.
Guideline development groups	9a	Describe how all contributors to the guideline development were selected and their roles and responsibilities (e.g., steering group, guideline panel, external reviewers, systematic review team, and methodologists).
	9b	List all individuals involved in developing the guideline, including their title, role(s), and institutional affiliation(s).
Evidence		
Health care questions	10a	State the key questions that were the basis for the recommendations in PICO (population, intervention, comparator, and outcome) or other format as appropriate.
	10b	Indicate how the outcomes were selected and sorted.
Systematic reviews	11a	Indicate whether the guideline is based on new systematic reviews done specifically for this guideline or whether existing systematic reviews were used.
	11b	If the guideline developers used existing systematic reviews, reference these and describe how those reviews were identified and assessed (provide the search strategies and the selection criteria, and describe how the risk of bias was evaluated) and whether they were updated.
Assessment of the certainty of the body of evidence	12	Describe the approach used to assess the certainty of the body of evidence.
Recommendations		
Recommendations	13a	Provide clear, precise, and actionable recommendations.
	13b	Present separate recommendations for important subgroups if the evidence suggests that there are important differences in factors influencing recommendations, particularly the balance of benefits and harms across subgroups.
	13c	Indicate the strength of recommendations and the certainty of the supporting evidence.
Rationale/explanation for recommendations	14a	Describe whether values and preferences of the target population(s) were considered in the formulation of each recommendation. If yes, describe the approaches and methods used to elicit or identify these values and preferences. If values and preferences were not considered, provide an explanation.
	14b	Describe whether cost and resource implications were considered in the formulation of recommendations. If yes, describe the specific approaches and methods used (such as cost-effectiveness analysis) and summarize the results. If resource issues were not considered, provide an explanation.
	14c	Describe other factors taken into consideration when formulating the recommendations, such as equity, feasibility, and acceptability.
Evidence to decision processes	15	Describe the processes and approaches used by the guideline development group to make decisions, particularly the formulation of recommendations (such as how consensus was defined and achieved and whether voting was used).
Review and quality assurance		
External review	16	Indicate whether the draft guideline underwent independent review and, if so, how this was executed and the comments considered and addressed.
Quality assurance	17	Indicate whether the guideline was subjected to a quality assurance process. If yes, describe the process.

Continued on following page

Table–Continued

Section/Topic	Number	Item
Funding and declaration and management of interests		
Funding source(s) and role(s) of the funder	18a	Describe the specific sources of funding for all stages of guideline development.
	18b	Describe the role of funder(s) in the different stages of guideline development and in the dissemination and implementation of the recommendations.
Declaration and management of interests	19a	Describe what types of conflicts (financial and nonfinancial) were relevant to guideline development.
	19b	Describe how conflicts of interest were evaluated and managed and how users of the guideline can access the declarations.
Other information		
Access	20	Describe where the guideline, its appendices, and other related documents can be accessed.
Suggestions for further research	21	Describe the gaps in the evidence and/or provide suggestions for future research.
Limitations of the guideline	22	Describe any limitations in the guideline development process (such as the development groups were not multidisciplinary or patients' values and preferences were not sought), and indicate how these limitations might have affected the validity of the recommendations.

RIGHT = Reporting Items for practice Guidelines in HealThcare.

contributed to this work, including the EQUATOR Network; Guidelines International Network; GRADE (Grading of Recommendations Assessment, Development and Evaluation) Working Group; AGREE Collaboration; and Cochrane Collaboration. The draft checklist and explanation and elaboration statement had extensive peer review by experts in guideline development with diverse perspectives. We may have missed important items when we developed our initial list of items, but we made every effort to minimize this possibility by examining many guidance documents and manuals produced by guideline developers and consulting a broad range of experts in this field.

The RIGHT checklist is available in English, German, Croatian, Japanese, Korean, and simplified and traditional Chinese; we encourage groups to make additional translations. We plan to develop RIGHT extensions, including RIGHT-P (for guideline proposals), RIGHT-COI (for conflicts of interest), and RIGHT-A (for acupuncture). We ask persons who aim to develop related standards or create translations to contact the corresponding authors of this paper to coordinate efforts and avoid duplication.

Like any other reporting standard, the RIGHT checklist is an evolving document that needs continual assessment, improvement, and updating. We will revise the checklist in the future based on user feedback, results of formal and informal evaluations, and new studies on guideline reporting methods. We encourage users to submit their comments via the RIGHT Web site.

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Appendix 1: Members of the RIGHT Working Group

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Appendix 2: Contributions

Drs. Y. Chen and Norris and Prof. Yang conceived the RIGHT project and drafted the project proposal. Drs. Marušić, Qaseem, Meerpohl, Flottorp, Akl, Chan, Falck-Ytter, Ahmed, Barber, C. Chen, and Xu and Ms. Zhang were Delphi panelists and gave comments and suggestions on the draft item list. Drs. Y. Chen, Song, and Tang; Prof. Yang; and Ms. Wang generated suggested items, designed the questionnaires for the Delphi survey, and did the statistical analysis. Drs. Y. Chen and Norris drafted the manuscript, and all authors critically reviewed and revised it for important intellectual content. Dr. Y. Chen is the guarantor of the manuscript and affirms that it is an honest, accurate, and transparent account of the study being reported. All authors approved the final version of this article.

Appendix 3: Methods and Results for Systematically Searching for Handbooks on Guideline Development

Search Strategy

We conducted a systematic search on 30 April 2014 in MEDLINE (via PubMed; from 1966 onward) using the following combination of free-text terms:

#1 Clinical Practice Guideline*[tw]
#2 Clinical guideline*[tiab]
#3 Guideline*[ti]
#4 guidance*[ti]
#5 consensus[ti]
#6 recommendation*[ti]
#7 OR#1-#6
#8 methodolog*[tiab]
#9 handbook*[tiab]
#10 manual*[tiab]
#11 toolkit*[tiab]
#12 OR#8-#11
#13 #7 AND #12
#14 Practice Guideline[pt]
#15 #13 NOT #14

On 30 April 2014, we also performed a search using the Google search engine (Alphabet). We added the following search terms individually in Google and browsed the first 200 records for each term:

#1 guideline methodolog*
#2 guideline handbook
#3 guideline manual
#4 guideline toolkit
#5 guidance methodolog*
#6 guidance handbook
#7 guidance manual
#8 guidance toolkit
#9 consensus methodolog*
#10 consensus handbook
#11 consensus manual
#12 consensus toolkit
#13 recommendation methodolog*
#14 recommendation handbook
#15 recommendation manual
#16 recommendation toolkit
#17 standard methodolog*
#18 standard handbook
#19 standard manual
#20 standard toolkit

We perused the reference lists of all eligible handbooks for additional materials not captured by the aforementioned searches. In addition, we examined the reference lists in the articles by Ansari and Rashidian (31) and Vernooij and colleagues (32), which were identified in our literature review.

Eligibility Criteria

Handbooks that provided guidance on the entire development process of practice guidelines were included. Documents that were written by individuals, were outdated versions that had been subsequently updated, or were focused on specific aspects of guideline development (such as updating; systematic reviews, or the GRADE process) were excluded. We included handbooks (English language only) if they contained a section on how to present, write, or report a guideline.

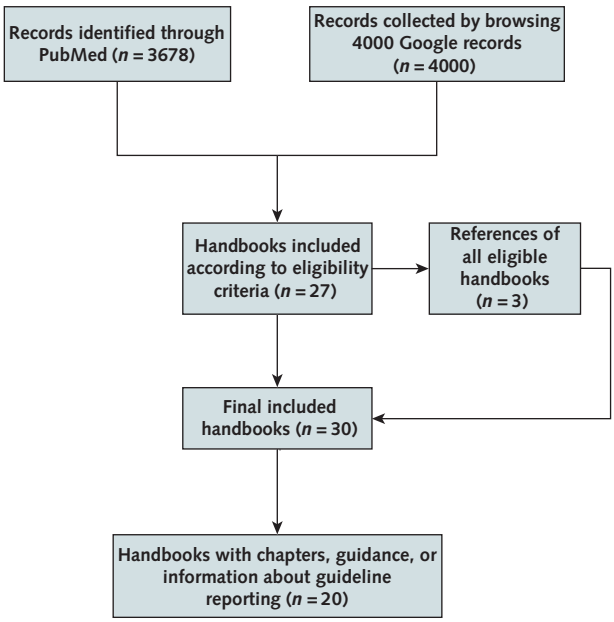
Handbook Selection

Two reviewers independently screened all identified records (Q.W. and K.T.). Disagreements were resolved by consensus, and if necessary, with the help of team leader (Y.C.). We ultimately included 30 handbooks on guideline development, two thirds of which contained sections on reporting.

Web-Only References

31. **Ansari S, Rashidian A.** Guidelines for guidelines: are they up to the task? A comparative assessment of clinical practice guideline development handbooks. PLoS One. 2012;7:e49864. [PMID: 23189167] doi:10.1371/journal.pone.0049864
32. **Vernooij RW, Sanabria AJ, Solà I, Alonso-Coello P, Martínez García L.** Guidance for updating clinical practice guidelines: a systematic review of methodological handbooks. Implement Sci. 2014; 9:3. [PMID: 24383701] doi:10.1186/1748-5908-9-3

Appendix Figure. Characteristics of the included handbooks.



Appendix Table. Handbook Selection

Number	Title	Year	Institution	Reporting Guidance*
1	Guidelines for Clinical Practice: From Development to Use	1992	U.S. Department of Health and Human Services	None
2	A Guide to the Development, Implementation and Evaluation of Clinical Practice Guidelines	1998	National Health Medical Research Council	Full
3	How to Develop Cost-Conscious Guidelines	2001	Health Technology Assessment National Health Service Research and Development Health Technology Assessment Programme	None
4	Handbook for the Preparation of Explicit Evidence-Based Clinical Practice Guidelines	2001	New Zealand Guidelines Group	Full
5	Developing a Methodology for Drawing Up Guidelines on Best Medical Practices	2002	Committee of Ministers of the Council of Europe	None
6	Guide for Guideline: A Guide for Clinical Guideline Development	2003	International Diabetes Federation	None
7	Handbook: Developing and Applying National Guidelines on Nutrition and HIV/AIDS	2003	Regional Centre for Quality of Health Care	Part
8	Framework for Clinical Guideline Development in Physiotherapy	2004	European Region of the World Confederation for Physical Therapy	Full
9	Registered Nurses' Association of Ontario Guideline Development Methodology	2006	Nursing Best Practice Research Unit	Full
10	Evidence-Based Care Guideline Development and Update Process	2006	Cincinnati Children's Hospital Medical Center	None
11	Handbook on Clinical Practice Guideline Development	2007	Canadian Medical Association	Full (refer to the Conference on Guideline Standardization)
12	U.S. Preventive Services Task Force Procedure Manual	2008	Agency for Healthcare Research and Quality	None
13	Clinical Practice Guideline Development Handbook for Stroke Care	2009	World Stroke Organization Stroke Guideline Sub-Committee	Full
14	Updating the Guideline Methodology of the Healthcare Infection Control Practices Advisory Committee	2009	Healthcare Infection Control Practices Advisory Committee	None
15	Methodology Manual and Policies From the ACCF/AHA Task Force on Practice Guidelines	2010	American College of Cardiology Foundation and American Heart Association	Part
16	Clinical Practice Guidelines Process Manual	2011	American International Health Alliance	None
17	Clinical Practice Guideline Process Manual	2011	American Academy of Neurology	Full
18	British HIV Association Guideline Development Manual	2011	British HIV Association	Full
19	SIGN 50: A Guideline Developer's Handbook	2011	Scottish Intercollegiate Guidelines Network	Full
20	WHO Handbook for Guideline Development	2012	World Health Organization	Part
21	Concise Guidelines Series Handbook: A Series of Evidence-Based Guidelines for Clinical Management	2012	Royal College of Physicians Clinical Standards Department	Full
22	Guidelines and Protocols Advisory Committee Handbook: Clinical Practice Guidelines and Protocols by the Guidelines and Protocols Advisory Committee	2012	Guidelines and Protocols Advisory Committee British Columbia Medical Association/The Medical Services Branch of the British Columbia/Ministry of Health	None
23	Process and Methods Guides: The Guidelines Manual	2012	National Institute for Health and Care Excellence	Full
24	Clinical Practice Guideline Development Manual, Third Edition: A Quality-Driven Approach for Translating Evidence into Action	2013	American Academy of Otolaryngology–Head and Neck Surgery	Full
25	ADA Clinical Practice Guidelines Handbook	2013	American Dental Association Center for Evidence-Based Dentistry	Full
26	National Clinical Effectiveness Committee Guideline Developers Manual Appendix IV: NCEC Clinical Guideline Template	2013	National Clinical Effectiveness Committee	Full
27	British Thoracic Society Standards of Care Committee Guideline Production Manual	2013	British Thoracic Society	Full
28	ASCO Guideline Procedures Manual	2014	The American Society of Clinical Oncology	None
29	Manual for ESHRE Guideline Development	2014	European Society of Human Reproduction and Embryology	Full
30	KHA-CARI Guidelines Development Manual	2014	Board of Kidney Health Australia	Full

* "None" indicates that the handbook does not contain any chapters or sections on reporting guidance. "Part" indicates that the handbook contains several sentences or paragraphs on reporting guidance but not an entire chapter. "Full" indicates that the handbook contains at least 1 entire chapter on reporting guidance.