

# A Reporting Tool for Adapted Guidelines in Health Care: The RIGHT-Ad@pt Checklist

Yang Song, MD, Msc; Pablo Alonso-Coello, MD, PhD; Monica Ballesteros, PhD; Francoise Cluzeau, PhD; Robin W.M. Vernooij, PhD; Thurayya Arayssi, MD; Soumyadeep Bhaumik, MBBC, Msc; Yaolong Chen, MMed, PhD; Davina Ghera, MPH, PhD; Etienne V. Langlois, PhD; Paulina Fuentes Padilla, MD, Msc; Holger J. Schünemann, MD, MSc, PhD; Elie A. Akl, MD, MPH, PhD; Laura Martínez García, MD, MPH, PhD; and RIGHT-Ad@pt Working Group\*

**Background:** Adaptation of existing guidelines can be an efficient way to develop contextualized recommendations. Transparent reporting of the adaptation approach can support the transparency and usability of the adapted guidelines.

**Objective:** To develop an extension of the RIGHT (Reporting Items for practice Guidelines in HealThcare) statement for the reporting of adapted guidelines (including recommendations that have been adopted, adapted, or developed de novo), the RIGHT-Ad@pt checklist.

**Design:** A multistep process was followed to develop the checklist: establishing a working group, generating an initial checklist, optimizing the checklist (through an initial assessment of adapted guidelines, semistructured interviews, a Delphi consensus survey, an external review, and a final assessment of adapted guidelines), and approval of the final checklist by the working group.

**Setting:** International collaboration.

**Participants:** A total of 119 professionals participated in the development process.

**Measurements:** Participants' consensus on items in the checklist.

**Results:** The RIGHT-Ad@pt checklist contains 34 items grouped in 7 sections: basic information (7 items); scope (6 items); rigor of development (10 items); recommendations (4 items); external review and quality assurance (2 items); funding, declaration, and management of interest (2 items); and other information (3 items). A user guide with explanations and real-world examples for each item was developed to provide a better user experience.

**Limitation:** The RIGHT-Ad@pt checklist requires further validation in real-life use.

**Conclusion:** The RIGHT-Ad@pt checklist has been developed to improve the reporting of adapted guidelines, focusing on the standardization, rigor, and transparency of the process and the clarity and explicitness of adapted recommendations.

**Primary Funding Source:** None.

*Ann Intern Med.* doi:10.7326/M21-4352

Annals.org

For author, article, and disclosure information, see end of text.

This article was published at Annals.org on 15 March 2022.

\* For members of the RIGHT-Ad@pt Working Group, see the Appendix (available at Annals.org).

The World Health Organization defines guidelines as “systematically developed evidence-based statements which assist providers, recipients, and other stakeholders to make informed decisions about appropriate health interventions” (1). The development of high-quality de novo guidelines requires considerable resources, both financial and human (2). However, these resources are limited for almost all guideline development settings (3), especially those not able to develop their own guidelines (4–6). One option to address these barriers is the adaptation of published, high-quality guidelines (7–9).

We define guideline adaptation as adapting, adopting, or developing de novo recommendations from an existing, trustworthy guideline to create contextualized recommendations for a different health system (8–10). The adaptation of guidelines could save time and resources, avoid duplication of effort, and provide rapid and contextualized recommendations. This process has been especially important during the COVID-19 pandemic (7–9, 11).

Eight formal methodological frameworks for the guideline adaptation process have been identified (10, 12), and new methods and experiences are continuously emerging (13, 14). The ADAPTE framework was one of the earliest systematic approaches to adapt guidelines to local context (15). More recently, the GRADE-ADOLPMENT (Grading of Recommendations Assessment, Development and Evaluation Evidence to Decision frameworks for adoption, adaptation,

and de novo development of trustworthy recommendations) approach has been developed (9). However, the quality of adapted guidelines and their reporting still needs to be improved (16, 17).

Reporting guidelines enhance the accurate, complete, and transparent reporting of health research and evidence-based guidelines ([www.equator-network.org](http://www.equator-network.org)). The RIGHT (Reporting Items for practice Guidelines in HealThcare) statement informs the reporting of the guideline development (18); however, it does not cover reporting of steps that are specific to guideline adaptation. Therefore, to ensure rigor, transparency, clarity, and reproducibility of reporting the adaptation process, we developed an extension of the RIGHT statement, the RIGHT-Ad@pt checklist. In this article, we report on the process for developing and refining the checklist.

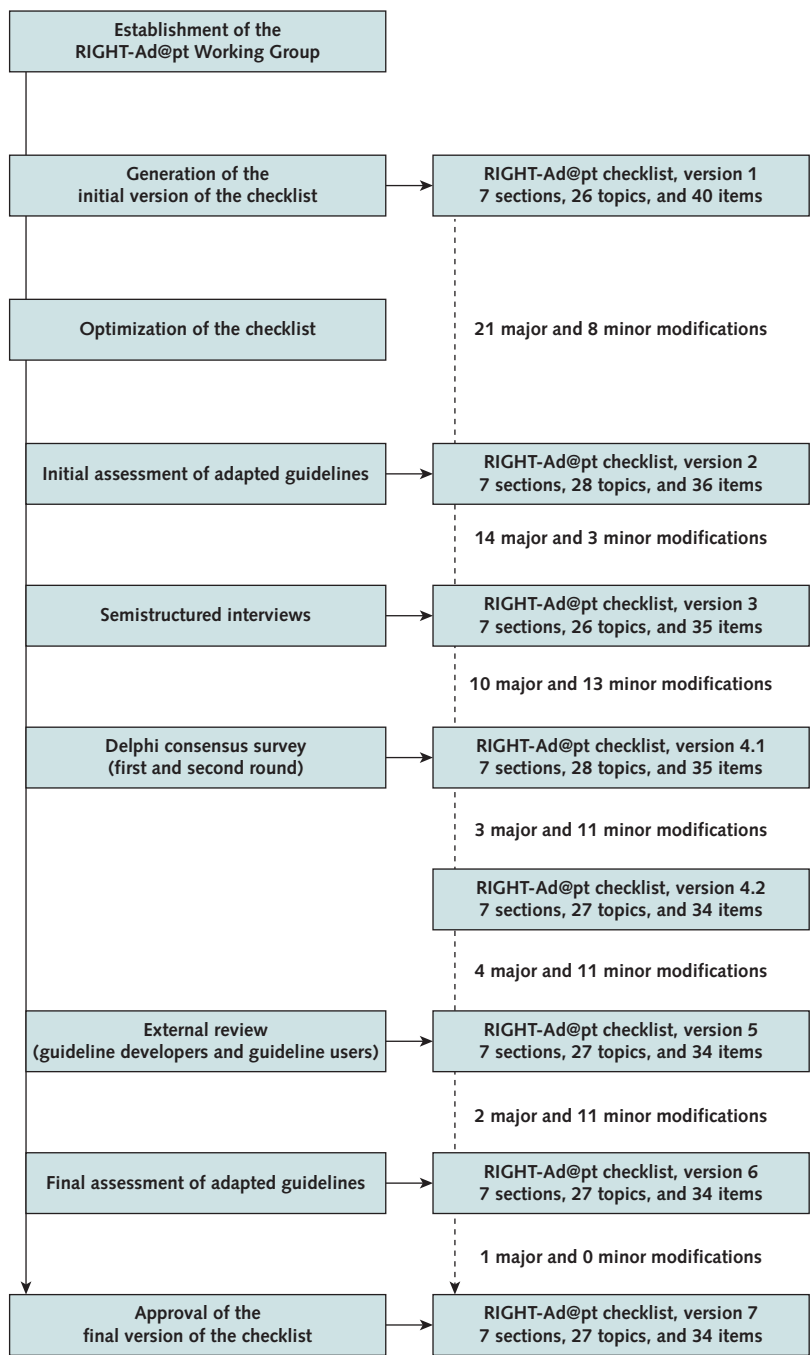
## METHODS

A detailed description of methods is available in a previously published protocol (19). There was no deviation from

### See also:

Web-Only  
Supplement

Figure 1. Multistep development process of the RIGHT-Ad@pt checklist.



RIGHT = Reporting Items for practice Guidelines in HealthCare.

the protocol other than a timeline delay. Figure 1 shows the multistep development process of the RIGHT-Ad@pt checklist, which started in May 2019 and was completed in October 2021.

### Establishment of the RIGHT-Ad@pt Working Group

The RIGHT-Ad@pt Working Group included the coordination team, advisory group, and Delphi panel. We

collected the conflicts of interests of all members involved in the RIGHT-Ad@pt Working Group to manage the participation of members.

After each step of the development process, the coordination team discussed the results, drafted a report, agreed on major modifications (significant content changes) or minor modifications (writing style improvement), produced a new version of the checklist, and refined with the advisory group's feedback.

### Generation of the Initial Checklist

The coordination team generated the initial checklist through online discussions, based on the RIGHT statement (18), research evidence in the field (10, 12, 16, 17, 20), and the advisory group's feedback.

### Optimization of the Checklist

#### *Initial Assessment of Adapted Guidelines*

We applied the initial checklist to a randomly selected convenience sample of published adapted guidelines to explore the adequacy of each item (Table 1 of Supplement 1, available at Annals.org) (21).

#### *Semistructured Interviews*

We conducted semistructured interviews with guideline developers who had experience with guideline adaptation in the past 3 years. We explored participants' views and experiences on guideline adaptation and collected their feedback on each item, potentially missing items, and the overall usefulness of the checklist (Table 1 of Supplement 1).

#### *Delphi Consensus Survey*

We conducted a Delphi consensus survey with the Delphi panel to reach a consensus on the inclusion of items in the checklist (Table 1 of Supplement 1). For each Delphi round, we asked participants to rate whether each item should be included in the checklist using a 7-point scale (1 = strongly disagree and 7 = strongly agree) (22-25) (Table 1 of Supplement 1). We conducted 2 Delphi rounds until consensus about each item's inclusion was reached (median score, 6 to 7), and no further substantial comments on the items were provided. We also recorded panel members' perceptions about understandability, usability, completeness of reporting, reporting quality of each item, and overall usefulness of the checklist (Table 1 of Supplement 1).

#### *External Review by Guideline Developers and Users*

*External Review With Guideline Developers.* We conducted an online survey of persons who were involved in guideline adaptation in the past 3 years. Participants ranked the usefulness of the items and the overall usefulness of the checklist (Table 1 of Supplement 1).

*External Review With Guideline Users.* We conducted semistructured interviews with guideline users who have used practice guidelines in the past 3 years. We collected participants' feedback on the understanding and usefulness of each item and the overall checklist (Table 1 of Supplement 1).

#### *Final Assessment of Adapted Guidelines*

We used another randomly selected convenience sample of published adapted guidelines to explore the adequacy of each item of the checklist and recorded the time to apply the checklist (Table 1 of Supplement 1).

### Approval of the Final Version of the Checklist

The coordination team generated the final version of the checklist. All members of the RIGHT-Ad@pt Working Group reviewed and approved the final version.

### Institutional Review Board Approval

This project received a waiver of approval from the Clinical Research Ethics Committee at the Hospital de la Santa Creu i Sant Pau (Barcelona, Spain).

### Role of the Funding Source

This work did not receive any funding support.

## RESULTS

Figure 1 shows the multistep development process of the RIGHT-Ad@pt checklist and the results for each step. A total of 119 professionals participated in the development process (Table). The final version of the RIGHT-Ad@pt checklist is presented in Figure 2. In addition, in the supplements we included relevant intermediate results (Tables 4 through 8 of Supplement 1, available at Annals.org), the user guide (Supplement 2, available at Annals.org), and the comparison with the RIGHT statement (Table 9 of Supplement 1, available at Annals.org) (18).

### Generation of the Initial Checklist

The initial checklist (RIGHT-Ad@pt checklist, version 1) retained all sections from the original RIGHT statement (18), although almost all items and topics were tailored for the adaptation process (10, 12). The initial checklist comprised 7 sections, 26 topics, and 40 items (Figure 1).

### Optimization of the Checklist

#### *Initial Assessment of Adapted Guidelines*

We assessed 10 adapted guidelines using the RIGHT-Ad@pt checklist, version 1 (Table 2 of Supplement 1, available at Annals.org). Twenty-five items were deemed adequate for guideline reporting (25 of 40 [62.5%]), whereas 15 (15 of 40 [37.5%]) required further review (Table 3 of Supplement 1, available at Annals.org). We made 21 major and 8 minor modifications to create version 2 of the RIGHT-Ad@pt checklist (Table 4 of Supplement 1, available at Annals.org). We also developed a user guide that included explanations and examples for each item.

#### *Semistructured Interviews*

We conducted a total of 10 semistructured interviews. The participants described 4 main steps of the adaptation process, including selection of scope, assessment of source materials (which comprised 3 stepwise assessments: guideline, recommendations, and evidence levels), decision-making process, and external review and follow-up process (26). We made 14 major and 3 minor modifications and improved the user guide (Table 4 of Supplement 1).

#### *Delphi Consensus Survey*

Twenty-seven professionals agreed to participate in the Delphi consensus survey. Of these, 23 completed the first round of the survey (23 of 27; 85.2% response rate). All items were rated as essential to be included and understandable (Table 5 of Supplement 1, available at Annals.org). A few items (9 of 35 [25.7%]) raised concerns about their usability, completeness, and quality for

**Table.** Characteristics of Participants in the Multistep Development Process

Characteristic	RIGHT-Ad@pt Working Group			Semistructured Interviews	External Review		Total
	Coordination Team	Advisory Group*	Delphi Panel, First Round		Guideline Developers	Guideline Users	
<b>Participants, n</b>	7	8	23	10	61	10	119
<b>Continents, n (%)</b>							
Africa	-	-	1 (4.3)	1 (10.0)	3 (4.9)	1 (10.0)	6 (5.0)
Asia	1 (14.3)	3 (37.5)	4 (17.4)	3 (30.0)	8 (13.1)	3 (30.0)	22 (18.5)
Australia	-	1 (12.5)	3 (13.0)	-	2 (3.3)	-	6 (5.0)
Europe	6 (85.7)	2 (25.0)	7 (30.4)	2 (20.0)	28 (45.9)	3 (30.0)	48 (40.3)
North America	-	1 (12.5)	2 (8.7)	4 (40.0)	16 (26.2)	2 (20.0)	25 (21.0)
South America	-	1 (12.5)	6 (26.1)	-	4 (6.6)	1 (10.0)	12 (10.1)
<b>Country income, n (%)†</b>							
High income	6 (85.7)	6 (75.0)	12 (52.2)	6 (60.0)	47 (77.0)	5 (50.0)	82 (68.9)
Low to middle income	1 (14.3)	2 (25.0)	11 (47.8)	4 (40.0)	14 (23.0)	5 (50.0)	37 (31.1)
<b>Organization, n (%)‡</b>							
Hospital	2 (28.6)	1 (12.5)	5 (21.7)	1 (10.0)	10 (16.4)	8 (80.0)	27 (22.7)
Primary care/general practice	-	-	1 (4.3)	-	4 (6.6)	1 (10.0)	6 (5.0)
Research/knowledge production organization	6 (85.7)	4 (50.0)	10 (43.5)	5 (50.0)	26 (42.6)	-	51 (42.9)
Service provider organization (community)	-	-	-	-	3 (4.9)	-	3 (2.5)
University	1 (14.3)	3 (37.5)	9 (39.1)	1 (10.0)	17 (27.9)	2 (20.0)	33 (27.7)
Other	1 (14.3)	1 (12.5)	1 (4.3)	4 (40.0)	17 (27.9)	-	24 (20.2)
<b>Current position, n (%)‡</b>							
Clinician	1 (14.3)	4 (50.0)	6 (26.1)	3 (30.0)	22 (36.1)	10 (100.0)	46 (38.7)
Community member	-	-	-	-	3 (4.9)	-	3 (2.5)
Educator	-	2 (25.0)	6 (26.1)	-	11 (18.0)	1 (10.0)	20 (16.8)
Policy maker	-	2 (25.0)	4 (17.4)	1 (10.0)	9 (14.8)	-	16 (13.4)
Researcher/methodologist	7 (100.0)	4 (50.0)	17 (73.9)	7 (70.0)	34 (55.7)	3 (30.0)	72 (60.5)
Service provider	-	-	3 (13.0)	1 (10.0)	1 (1.6)	-	5 (4.2)
Student	-	-	-	-	1 (1.6)	-	1 (0.8)
Other	-	2 (25.0)	1 (4.3)	1 (10.0)	1 (1.6)	-	5 (4.2)
<b>Experience in the guidelines field, n (%)‡</b>							
Experience in developing guidelines	7 (100.0)	6 (75.0)	17 (73.9)	9 (90.0)	42 (68.9)	6 (60.0)	87 (73.1)
Experience in adapting guidelines	6 (85.7)	5 (62.5)	14 (60.9)	9 (90.0)	30 (49.2)	6 (60.0)	70 (58.8)
Methodological experience in developing guidelines	7 (100.0)	5 (62.5)	16 (69.6)	8 (80.0)	40 (65.6)	5 (50.0)	81 (68.1)
Methodological experience in adapting guidelines	7 (100.0)	4 (50.0)	13 (56.5)	9 (90.0)	26 (42.6)	5 (50.0)	64 (53.8)
Guidelines user	-	3 (37.5)	9 (39.1)	4 (40.0)	22 (36.1)	9 (90.0)	47 (39.5)
Other	-	-	5 (21.7)	-	6 (9.8)	1 (10.0)	12 (10.1)

RIGHT = Reporting Items for practice Guidelines in HealThcare.

\* One member withdrew in 2020.

† Country income was classified according to The World Bank data (<https://data.worldbank.org/country>), accessed in May 2021.

‡ More than 1 response possible.

reporting adapted guidelines (items related to identification as an adapted guideline, year of publication, developer and country, abbreviations and acronyms, contact information, basic epidemiologic information of the problem, access, implementation, and update). We received substantial feedback on both the checklist and user guide. The panel members rated the checklist as useful for reporting and for assessing the reporting completeness of the adapted guidelines (Table 6 of Supplement 1, available at [Annals.org](https://www.annals.org)). We made 10 major and 13 minor modifications, improved the user guide, and subsequently improved the checklist into version 4.1 (Table 4 of Supplement 1).

A total of 23 professionals agreed to participate in the second round of the Delphi survey. Of these, 22 completed the second round of the survey (22 of 23; 95.7%

response rate). All items were maintained to be included and understandable (except for 1 item) (Table 5 of Supplement 1). The score improved for almost all 9 items that had some concerns for usability, completeness, and quality in the first round (Table 5 of Supplement 1). We received substantial feedback about 3 items. The rating of the checklist as useful for reporting and for assessing the reporting of the adapted guidelines was maintained (Table 6 of Supplement 1).

We made 3 major and 11 minor modifications, improved the user guide, and created the RIGHT-Ad@pt checklist, version 4.2 (Table 4 of Supplement 1). We shared this version and a modifications report with the Delphi panel, and we did not receive further comments. Therefore, we did not conduct a third round of the Delphi survey.

**Figure 2.** The RIGHT-Ad@pt checklist. RIGHT = Reporting Items for practice Guidelines in HealThcare.

7 sections, 27 topics, and 34 items	Assessment	Page(s)	Note(s)
<b>Basic information</b>			
<b>Title/subtitle</b>			
1 Identify the report as an adaptation of practice guideline(s), that is include "guideline adaptation", "adapting", "adapted guideline/recommendation(s)", or similar terminology in the title/subtitle.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear		
2 Describe the topic/focus/scope of the adapted guideline.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear		
<b>Cover/first page</b>			
3 Report the respective dates of publication and the literature search of the adapted guideline.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear		
4 Describe the developer and country/region of the adapted guideline.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear		
<b>Executive summary/abstract</b>			
5 Provide a summary of the recommendations contained in the adapted guideline.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear		
<b>Abbreviations and acronyms</b>			
6 Define key terms and provide a list of abbreviations and acronyms (if applicable).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear		
<b>Contact information of the guideline adaptation group</b>			
7 Report the contact information of the developer of the adapted guideline.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear		
<b>Scope</b>			
<b>Source guideline(s)</b>			
8 Report the name and year of publication of the source guideline(s), provide the citation(s), and whether source authors were contacted.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear		
<b>Brief description of the health problem(s)</b>			
9 Provide the basic epidemiological information about the problem (including the associated burden), health systems relevant issues, and note any relevant differences compared to the source guideline(s).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear		
<b>Aim(s) and specific objectives</b>			
10 Describe the aim(s) of the adapted guideline and specific objectives, and note any relevant differences compared to the source guideline(s).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear		
<b>Target population(s)</b>			
11 Describe the target population(s) and subgroup(s) (if applicable) to which the recommendation(s) is addressed in the adapted guideline, and note any relevant differences compared to the source guideline(s).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear		
<b>End-users and settings</b>			
12 Describe the intended target users of the adapted guideline, and note any relevant differences compared to the source guideline(s).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear		
13 Describe the setting(s) for which the adapted guideline is intended, and note any relevant differences compared to the source guideline(s).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear		

Figure 2–Continued.

<b>Rigor of development</b>		
<b>Guideline adaptation group</b>		
14	List all contributors to the guideline adaptation process and describe their selection process and responsibilities.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>Adaptation framework/methodology</b>		
15	Report which framework or methodology was used in the guideline adaptation process.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>Source guideline(s)</b>		
16	Describe how the specific source guideline(s) was(were) selected.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>Key questions</b>		
17	State the key questions of the adapted guideline using a structured format, such as PICO (population, intervention, comparator, and outcome), or another format as appropriate.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
18	Describe how the key questions were developed/modified, and/or prioritized.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>Source recommendation(s)</b>		
19	Describe how the recommendation(s) from the source guideline(s) was(were) assessed with respect to the evidence considered for the different criteria, the judgements and considerations made by the original panel.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>Evidence synthesis</b>		
20	Indicate whether the adapted recommendation(s) is/are based on existing evidence from the source guideline(s), and/or additional evidence.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
21	If new research evidence was used, describe how it was identified and assessed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>Assessment of the certainty of the body of evidence and strength of recommendation</b>		
22	Describe the approach used to assess the certainty/quality of the body/ies of evidence and the strength of recommendations in the adapted guideline and note any differences (if applicable) compared to the source guideline(s).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>Decision-making processes</b>		
23	Describe the processes used by the guideline adaptation group to make decisions, particularly the formulation of recommendations.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>Recommendations</b>		
<b>Recommendations</b>		
24	Report recommendations and indicate whether they were adapted, adopted, or <i>de novo</i> .	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
25	Indicate the direction and strength of the recommendations and the certainty/quality of the supporting evidence and note any differences compared to the source recommendations(s) (if applicable).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
26	Present separate recommendations for important subgroups if the evidence suggests important differences in factors influencing recommendations and note any differences compared to the source recommendations(s) (if applicable).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear

Figure 2–Continued.

<b>Rationale/explanation for recommendations</b>		
27	Describe the criteria/factors that were considered to formulate the recommendations or note any relevant differences compared to the source guideline(s) (if applicable).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>External review and quality assurance</b>		
<b>External review</b>		
28	Indicate whether the adapted guideline underwent an independent external review. If yes, describe the process.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>Organizational approval</b>		
29	Indicate whether the adapted guideline obtained organizational approval. If yes, describe the process.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>Funding, declaration, and management of interest</b>		
<b>Funding source(s) and funder role(s)</b>		
30	Report all sources of funding for the adapted guideline and source guideline(s), and the role of the funders.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>Declaration and management of interests</b>		
31	Report all conflicts of interest of the adapted and the source guideline(s) panels, and how they were evaluated and managed.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>Other information</b>		
<b>Implementation</b>		
32	Describe the potential barriers and strategies for implementing the recommendations (if applicable).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>Update</b>		
33	Briefly describe the strategy for updating the adapted guideline (if applicable).	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear
<b>Limitations and suggestions for further research</b>		
34	Describe the challenges of the adaptation process, the limitations of the evidence, and provide suggestions for future research.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unclear

RIGHT = Reporting Items for practice Guidelines in HealThcare.

### **External Review With Guideline Developers and Users**

**External Review With Guideline Developers.** A total of 61 participants completed the survey (61 of 92; 66.3% response rate). All items were rated as useful (Table 5 of Supplement 1). The participants rated the checklist as useful for reporting, for assessing the reporting of the adapted guidelines, and for informing guideline adaptation process (Table 6 of Supplement 1).

**External Review With Guideline Users.** We conducted a total of 10 semistructured interviews. All participants judged the checklist as understandable and useful for reporting the guideline adaptation process.

On the basis of external reviewers' feedback, we made 4 major and 11 minor modifications, improved the user guide, and created the RIGHT-Ad@pt checklist, version 5 (Table 4 of Supplement 1).

### **Final Assessment of Adapted Guidelines**

We assessed 10 adapted guidelines using version 5 of the RIGHT-Ad@pt checklist (Table 7 of Supplement 1, available at Annals.org). Thirty-one items were considered adequate for the reporting (31 of 34 [91.2%]), whereas 3 (3 of 34 [8.8%]) presented discrepancies about reporting (Table 8 of Supplement 1, available at Annals.org). The reviewers spent an average of 45 minutes (range, 40 to 54 minutes) assessing adapted guidelines using the checklist. We made 2 major and 11 minor modifications and improved the user guide (Table 4 of Supplement 1).

### **Approval of the Final Version of the Checklist**

We circulated version 6 of the RIGHT-Ad@pt checklist within the coordination team and advisory group for

final feedback. We made 1 major modification on the basis of a substantial comment (Table 4 of Supplement 1). The final version of the checklist (RIGHT-Ad@pt Checklist, version 7) was approved by the RIGHT-Ad@pt Working Group.

The final RIGHT-Ad@pt checklist, version 7, contains 7 sections, 27 topics, 34 items, and the user guide (Figure 2 and Supplement 2). The sections comprise basic information (7 items); scope (6 items); rigor of development (10 items); recommendations (4 items); external review and quality assurance (2 items); funding, declaration, and management of interest (2 items); and other information (3 items) (Figure 2). In addition, a user guide was developed to support the use of the checklist (Supplement 2).

## DISCUSSION

We developed an extension of the RIGHT statement for the reporting of adapted guidelines—the RIGHT-Ad@pt checklist—through an exhaustive process that included a literature review as well as input and consensus from a full range of relevant stakeholders, including guideline adaptation experts. We also evaluated the applicability and usability of the checklist and did validity testing.

The RIGHT-Ad@pt checklist can be used to guide the reporting of adapted guidelines, including adaptation process (“rigor of development” section) and the adapted recommendations (“recommendations” section). The checklist can also be applied to assess the completeness of reporting and, in combination with available adaptation frameworks, to inform adaptation processes. Users should apply the checklist along with the user guide to report adapted guidelines. Response options (“yes,” “no,” and “unclear”) can be used to provide judgments on the reporting content. We suggest at least 2 reviewers apply the RIGHT-Ad@pt checklist independently when assessing the completeness of reporting of an adapted guideline. Discrepancies should be solved by discussion or involve a third reviewer if there is a need to reach a consensus. It is recommended that users of the RIGHT-Ad@pt checklist do not score each item or create an overall score because that assumes equal weight across items, which may not be the case. Instead, we encourage users to interpret the reporting according to the responses and make an overall judgment.

Currently, there is no published guidance or checklist for reporting adapted guidelines. Similar to the RIGHT statement that focuses on reporting guideline recommendations, the RIGHT-Ad@pt checklist emphasizes the importance of methodological rigor in the adaptation process. The checklist includes 7 new items and improved 13 items by tailoring adaptation practice (Table 9 of Supplement 1, available at [Annals.org](http://Annals.org)). Besides, we renamed the “evidence” section in the RIGHT statement to “rigor of development” to better highlight the adaptation process. We also combined 19 RIGHT items into 6 RIGHT-Ad@pt items to shorten the checklist and increase usability. Furthermore, we deleted 1 item because of duplication and modified the wording for all items.

Unlike previous frameworks that focus on the practical adaptation process (9, 10, 15), the RIGHT-Ad@pt checklist focuses on reporting aspects for recommendations and

critical methodological processes. The RIGHT-Ad@pt checklist suggests stratifying the reporting of the evidence review process into guideline level (item 16), recommendation level (item 19), and evidence level (items 20 and 21). The stratification fits the guideline adaptation conceptual progression, which shifts from adapting guidelines to adapting recommendations, as a review of available frameworks suggests (12). The RIGHT-Ad@pt checklist also required explicitly reporting the decision-making process (item 23) and the rationale of the recommendations' modifications (item 27), which adaptation experts highlighted as an essential aspect to explore further (26). Besides, the RIGHT-Ad@pt checklist promotes transparency in the adaptation process by reporting differences about the guideline scope, recommendations, and the decision-making process compared with the source guidelines.

The RIGHT-Ad@pt checklist retains the strengths of the RIGHT statement while adequately contextualizing the guideline adaptation process. In addition, the checklist reflects a relatively strong overall consensus among a wide range of stakeholders, including guideline developers, users, journal editors, and policymakers, through a formal Delphi consensus survey. Finally, we also conducted usability testing with external reviewers and 2 assessments with published adapted guidelines, enhancing the validity of the RIGHT-Ad@pt checklist for reporting of and assessing the reporting of adapted guidelines. The RIGHT-Ad@pt checklist, despite having showed face and content validity, requires further validation in real-life use.

Different audiences may use the RIGHT-Ad@pt checklist for different purposes. First, guideline developers can use the checklist to report their adapted guidelines. Second, journal editors and reviewers could use the checklist to ensure the completeness and transparency of the reporting in the publication of adapted guidelines. Third, detailed and clear reporting would help clinicians accurately identify the adapted recommendations, whether they are different from the source recommendations, and the justifications for any differences. These details can assist clinicians applying adapted recommendations to their clinical practice. Finally, policymakers could evaluate the feasibility of adapted recommendations for local implementation on the basis of the reporting contents suggested by the checklist, therefore enhancing the applicability and potential effect of guidelines and supporting health decision making.

Future research should address the completeness of adapted guidelines and whether the publication of RIGHT-Ad@pt will have an influence on reporting. This research could also explore the potential effect of RIGHT-Ad@pt on the quality of adapted guidelines and efficiency of the adaptation process. Another aspect worth exploring is the development of an abridged version of the RIGHT-Ad@pt checklist that facilitates its application.

The RIGHT-Ad@pt checklist will be published on the EQUATOR Network's website ([www.equator-network.org](http://www.equator-network.org)), the RIGHT website ([www.right-statement.org](http://www.right-statement.org)), and the Guidelines International Network website (<https://g-i-n.net/get-involved/resources/>). We will also encourage its translation into other languages and engage the journal



editors to use the checklist to standardize the reporting of adapted guidelines to be published. We are preparing an online version of the RIGHT-Ad@pt checklist to facilitate its application, in which we will include a comment box to gather further feedback and update the checklist in the future.

From Iberoamerican Cochrane Centre (CCIB)-Biomedical Research Institute Sant Pau (IIB Sant Pau), and PhD Programme in Methodology of Biomedical Research and Public Health, Universitat Autònoma de Barcelona, Bellaterra, Barcelona, Spain (Y.S.); Iberoamerican Cochrane Centre (CCIB)-Biomedical Research Institute Sant Pau (IIB Sant Pau), Barcelona, and Centro de Investigación Biomédica en Red de Epidemiología y Salud Pública (CIBERESP), Madrid, Spain (P.A., L.M.G.); Centro de Investigación Biomédica en Red de Epidemiología y Salud Pública (CIBERESP), Madrid, Spain (M.B.); London, United Kingdom (F.C.); Department of Nephrology and Hypertension and Julius Centre for Health Sciences and Primary Care, University Medical Centre Utrecht, Utrecht University, Utrecht, the Netherlands (R.W.V.); Weill Cornell Medicine-Qatar, Doha, Qatar (T.A.); Meta-research & Evidence Synthesis Unit, The George Institute for Global Health, New Delhi, India (S.B.); Research Unit of Evidence-Based Evaluation and Guidelines, Chinese Academy of Medical Sciences (2021RU017), School of Basic Medical Sciences, Lanzhou University, and WHO Collaborating Centre for Guideline Implementation and Knowledge Translation, Lanzhou, China (Y.C.); National Health and Medical Research Council, Canberra, Australian Capital Territory, Australia (D.G.); Partnership for Maternal, Newborn & Child Health (PMNCH), World Health Organization, Geneva, Switzerland (E.V.L.); Facultad de Medicina y Odontología, Universidad de Antofagasta, Antofagasta, Chile (P.F.P.); Department of Health Research Methods, Evidence, and Impact (HEI), Michael G. DeGroot Cochrane Canada and McGRADE Centres, and Department of Medicine, McMaster University, Hamilton, Canada, and Department of Biomedical Sciences, Humanitas University, Milan, Italy (H.J.S.); and Department of Internal Medicine, American University of Beirut, Beirut, Lebanon, and Department of Health Research Methods, Evidence, and Impact (HEI), McMaster University, Hamilton, Canada (E.A.A.).

**Acknowledgment:** The authors thank the following participants for their contributions in the optimization activities of the RIGHT-Ad@pt checklist: Kendall E. Alexander; Rasmeh Al Huneiti; Huda Amer Al-Katheeri; Behnam Farhoudi; Geertruida E. Bekkering; Koert Burger; Stefan Clos; Nianqi Cui; Deandrea Silvia; Nicolas Delvaux; Eddy Lang; Craig Grime; Kristin Gillenwater; Karen Huamán; Nora Ibargoyen-Roteta; Alfonso Iorio; Sasja Jul Håkonsen; Sandra L. Kaplan; Ina B. Kopp; Patrick Langford; Abha Mehndiratta; Sengar Manju; Teddy Oosterhuis; Gabriel Ortiz; Rodrigo Pardo-Turriago; Amir Qaseem; Roberto Quijada; Karla Salas-Gama; Sameh Shaheen; Raija Sipilä; Jean Paul Stahl; Corinne Stoop; Airton Tetelbom Stein; Sarah Temin; Henning Thole; Janice Tufte; Mitchell Van Doormaal; António Vaz Carneiro.

**Disclosures:** Disclosures can be viewed at [www.acponline.org/authors/icmje/ConflictOfInterestForms.do?msNum=M21-4352](http://www.acponline.org/authors/icmje/ConflictOfInterestForms.do?msNum=M21-4352).

**Reproducible Research Statement:** *Study protocol:* Available at [bmjopen.bmj.com/content/9/9/e031767](http://bmjopen.bmj.com/content/9/9/e031767) and [www.equator-network.org/library/reporting-guidelines-underdevelopment/reporting-guidelines-underdevelopment-for-other-study-designs/#ADAPT](http://www.equator-network.org/library/reporting-guidelines-underdevelopment/reporting-guidelines-underdevelopment-for-other-study-designs/#ADAPT).

*Statistical code:* Not applicable. *Data set:* The interview guide for semistructured interviews, all versions of the checklist, and qualitative data are available and accessible on request.

**Corresponding Authors:** Pablo Alonso-Coello, MD, PhD, Iberoamerican Cochrane Centre, Biomedical Research Institute of Sant Pau (IIB Sant Pau-CIBERESP), Hospital de la Santa Creu i Sant Pau, Pavilion 18, Ground Floor, C/Sant Antoni Maria Claret 167, 08025 Barcelona, Spain; e-mail, [PALonso@santpau.cat](mailto:PALonso@santpau.cat); and Elie A. Akl, MD, MPH, PhD, Department of Internal Medicine, American University of Beirut Medical Center, PO Box 11-0236/CRI (E15), Riad-El-Solh Beirut 1107 2020, Beirut, Lebanon; e-mail, [ea32@aub.edu.lb](mailto:ea32@aub.edu.lb).

Author contributions are available at [Annals.org](http://Annals.org).

## References

1. World Health Organization. WHO handbook for guideline development. 2nd ed. World Health Organization; 2014.
2. Graham R, Mancher M, Miller Wolman D, et al, eds; Institute of Medicine (US) Committee on Standards for Developing Trustworthy Clinical Practice Guidelines. *Clinical Practice Guidelines We Can Trust*. National Academies Pr; 2011.
3. Schünemann HJ, Fretheim A, Oxman AD; WHO Advisory Committee on Health Research. Improving the use of research evidence in guideline development: 1. Guidelines for guidelines. *Health Res Policy Syst*. 2006;4:13. [PMID: 17118181]
4. Bhaumik S. Use of evidence for clinical practice guideline development. *Trop Parasitol*. 2017;7:65-71. [PMID: 29114482] doi:10.4103/tp.TP\_6\_17
5. Kahale LA, Ouertatani H, Brahem AB, et al. Contextual differences considered in the Tunisian ADOLOPMENT of the European guidelines on breast cancer screening. *Health Res Policy Syst*. 2021;19:80. [PMID: 33985535] doi:10.1186/s12961-021-00731-z
6. Arayssi T, Harfouche M, Darzi A, et al. Recommendations for the management of rheumatoid arthritis in the eastern Mediterranean region: an ADOLOPMENT of the 2015 American College of Rheumatology guidelines. *Clin Rheumatol*. 2018;37:2947-2959. [PMID: 30097896] doi:10.1007/s10067-018-4245-5
7. Fervers B, Burgers JS, Haugh MC, et al. Adaptation of clinical guidelines: literature review and proposition for a framework and procedure. *Int J Qual Health Care*. 2006;18:167-76. [PMID: 16766601]
8. Fervers B, Burgers JS, Voellinger R, et al; ADAPTE Collaboration. Guideline adaptation: an approach to enhance efficiency in guideline development and improve utilisation. *BMJ Qual Saf*. 2011;20:228-36. [PMID: 21209134] doi:10.1136/bmjqs.2010.043257
9. Schünemann HJ, Wiercioch W, Brozek J, et al. GRADE Evidence to Decision (EtD) frameworks for adoption, adaptation, and de novo development of trustworthy recommendations: GRADE-ADOLOPMENT. *J Clin Epidemiol*. 2017;81:101-110. [PMID: 27713072] doi:10.1016/j.jclinepi.2016.09.009
10. Darzi A, Abou-Jaoude EA, Agarwal A, et al. A methodological survey identified eight proposed frameworks for the adaptation of health related guidelines. *J Clin Epidemiol*. 2017;86:3-10. [PMID: 28412463] doi:10.1016/j.jclinepi.2017.01.016
11. Maaløe N, Ørtved AMR, Sørensen JB, et al. The injustice of unfit clinical practice guidelines in low-resource realities. *Lancet Glob Health*. 2021;9:e875-e879. [PMID: 33765437] doi:10.1016/S2214-109X(21)00059-0

12. Wang Z, Norris SL, Bero L. The advantages and limitations of guideline adaptation frameworks. *Implement Sci.* 2018;13:72. [PMID: 29843737] doi:10.1186/s13012-018-0763-4
13. Amer YS, Wahabi HA, Abou Elkheir MM, et al. Adapting evidence-based clinical practice guidelines at university teaching hospitals: a model for the eastern Mediterranean region. *J Eval Clin Pract.* 2019;25:550-560. [PMID: 29691950] doi:10.1111/jep.12927
14. McCaul M, Ernstzen D, Temmingh H, et al. Clinical practice guideline adaptation methods in resource-constrained settings: four case studies from South Africa. *BMJ Evid Based Med.* 2020;25:193-198. [PMID: 31292208] doi:10.1136/bmjebm-2019-111192
15. ADAPTE. The ADAPTE process: resource toolkit for guideline adaptation. Version 2.0 Accessed at <https://g-i-n.net/wp-content/uploads/2021/03/ADAPTE-Resource-toolkit-March-2010.pdf> on 1 August 2021.
16. Godah MW, Abdul Khalek RA, Kilzar L, et al. A very low number of national adaptations of the World Health Organization guidelines for HIV and tuberculosis reported their processes. *J Clin Epidemiol.* 2016; 80:50-56. [PMID: 27565977] doi:10.1016/j.jclinepi.2016.07.017
17. Abdul-Khalek RA, Darzi AJ, Godah MW, et al. Methods used in adaptation of health-related guidelines: a systematic survey. *J Glob Health.* 2017;7:020412. [PMID: 29302318] doi:10.7189/jogh.07.020412
18. Chen Y, Yang K, Marušić A, et al; RIGHT (Reporting Items for Practice Guidelines in Healthcare) Working Group. A reporting tool for practice guidelines in health care: the RIGHT statement. *Ann Intern Med.* 2017;166:128-132. [PMID: 27893062] doi:10.7326/M16-1565
19. Song Y, Darzi A, Ballesteros M, et al. Extending the RIGHT statement for reporting adapted practice guidelines in healthcare: the RIGHT-Ad@pt Checklist protocol. *BMJ Open.* 2019;9:e031767. [PMID: 31551391] doi:10.1136/bmjopen-2019-031767
20. Darzi A, Harfouche M, Arayssi T, et al. Adaptation of the 2015 American College of Rheumatology treatment guideline for rheumatoid arthritis for the eastern Mediterranean region: an exemplar of the GRADE ADOLOPMENT. *Health Qual Life Outcomes.* 2017;15: 183. [PMID: 28934978] doi:10.1186/s12955-017-0754-1
21. Glenton C, Carlsen B, Lewin S, et al. Applying GRADE-CERQual to qualitative evidence synthesis findings-paper 5: how to assess adequacy of data. *Implement Sci.* 2018;13:14. [PMID: 29384077] doi:10.1186/s13012-017-0692-7
22. Likert R. A technique for the measurement of attitudes. *Archives of Psychology.* 1932;22:140-155.
23. Akins RB, Tolson H, Cole BR. Stability of response characteristics of a Delphi panel: application of bootstrap data expansion. *BMC Med Res Methodol.* 2005;5:37. [PMID: 16321161]
24. Sinha IP, Smyth RL, Williamson PR. Using the Delphi technique to determine which outcomes to measure in clinical trials: recommendations for the future based on a systematic review of existing studies. *PLoS Med.* 2011;8:e1000393. [PMID: 21283604] doi:10.1371/journal.pmed.1000393
25. Finstad K. Response interpolation and scale sensitivity: evidence against 5-point scales. *J Usability Stud.* 2010;5:104-110.
26. Song Y, Ballesteros M, Li J, et al. Current practices and challenges in adaptation of clinical guidelines: a qualitative study based on semistructured interviews. *BMJ Open.* 2021;11:e053587. [PMID: 34857574] doi:10.1136/bmjopen-2021-053587

**Author Contributions:** Conception and design: E.A. Akl, P. Alonso-Coello, L. Martínez García, Y. Song.

Analysis and interpretation of the data: E.A. Akl, P. Alonso-Coello, T. Arayssi, M. Ballesteros, S. Bhaumik, YL. Chen, F. Cluzeau, D. Ghersi, E.V. Langlois, L. Martínez García, P. Fuentes, R.W.M. Vernooij, H. Schünemann, Y. Song.

Drafting of the article: P. Alonso-Coello, L. Martínez García, Y. Song.

Critical revision of the article for important intellectual content: E.A. Akl, P. Alonso-Coello, T. Arayssi, M. Ballesteros, S. Bhaumik, Y. Chen, F. Cluzeau, D. Ghersi, E.V. Langlois, L. Martínez García, P. Fuentes, R.W.M. Vernooij, H. Schünemann, Y. Song, Y.S. Amer, I. Arevalo-Rodriguez, S. Barnes, J. Barreto, D. Collis, S. Dyer, C. Fahim, I. Florez, V. Gallegos-Rivero, M. Klugar, T. Kuijpers, J. L. Mathew, Z. Munn, S. Norris, D.F. Patiño-Lugo, C.S. Pramesh, J. Rodriguez, S. Roy, E. Shin, O. Sosa, P.O. Vandvik, M. Velez, R. Woodcraft.

Final approval of the article: E.A. Akl, P. Alonso-Coello, Y. Amer, T. Arayssi, I. Arevalo-Rodriguez, M. Ballesteros, S. Barnes, J. Barreto, S. Bhaumik, Y. Chen, F. Cluzeau, D. Collis, S. Dyer, C. Fahim, I. Florez, P. Fuentes, V. Gallegos-Rivero, D. Ghersi, M. Klugar, T. Kuijpers, E.V. Langlois, L. Martínez García, J.L. Mathew, Z. Munn, S. Norris, D.F. Patiño-Lugo, C.S. Pramesh, J. Rodriguez, S. Roy, H. Schünemann, E. Shin, Y. Song, O. Sosa, P. O. Vandvik, M. Velez, R.W.M. Vernooij, R. Woodcraft.

Administrative, technical, or logistic support: Y. Song.

Collection and assembly of data: P. Alonso-Coello, L. Martínez García, Y. Song.

## APPENDIX: THE RIGHT-AD@PT WORKING GROUP

Coordination team: Yang Song, MD, Msc†; Pablo Alonso-Coello, MD, PhD†; Monica Ballesteros, PhD†; Françoise Cluzeau, PhD†; Robin W. M. Vernooij, PhD†; Elie A. Akl, MD, MPH, PhD†; Laura Martínez García, MD, MPH, PhD†.

Advisory group: Thurayya Arayssi, MD†; Soumyadeep Bhaumik, MBBC, Msc†; Yaolong Chen, MMed, PhD†; Davina Ghersi, MPH, PhD†; Etienne V. Langlois, PhD†; Paulina Fuentes Padilla, MD, Msc†; Holger J. Schünemann, MD, MSc, PhD†.

Delphi panel members: Yasser S. Amer, MBBCh, MSc†; Ingrid Arevalo-Rodriguez, MSc, PhD†; Steven Barnes, MA†; Jorge Barreto, MSc, PhD†; Deborah Collis, MPH, Msc†; Suzanne Dyer, PhD†; Christine Fahim, MSc, PhD†; Ivan Florez, MD, MSc, PhD†; Veronica Gallegos-Rivero, MD†; Miloslav Klugar, PhD†; Ton Kuijpers, PhD†; Joseph L. Mathew, MD, PhD†; Zachary Munn, PhD†; Sarah Norris, PhD†; Daniel F. Patiño-Lugo, MSc, PhD†; C. S. Pramesh, MSc†; Jaime Rodriguez, Md. MgSIG DPH DBA (c)†; Sudipto Roy, MD†; Ein-Soon Shin, MPH, PhD†; Ojino Sosa, MD†; Per Olav Vandvik, MD, PhD†; Marcela Velez, MD, MSc, PhD†; Rachel Woodcraft, PhD†.

Guidelines International Network Adaptation Working Group: Pablo Alonso-Coello, MD, PhD†; Yasser Amer, MBBCh, MSc†; Steven Barnes, MA†; Deborah Collis, MPH, Msc†; Ivan Florez, MD, MSc, PhD†; Miloslav Klugar, PhD†; Ton Kuijpers, PhD†; Joseph L. Mathew, MD, PhD†; Zachary Munn, PhD†; Ein-Soon Shin, MPH, PhD†; Yang Song, MD, Msc†; Ojino Sosa, MD†; Per Olav Vandvik, MD, PhD†; Rachel Woodcraft, PhD†.

† Author contributor.