

# The ACCORD guideline for reporting consensus methods: results of an implementation study

William T. Gattrell,<sup>1</sup> Patricia Logullo,<sup>2</sup> Amy Price,<sup>3</sup> Marcus Gbekte,<sup>4</sup> Brian S. Alper,<sup>5</sup> Emily C. Bruggeman,<sup>6</sup> Vandana Chaudhary,<sup>7</sup> Bert Yu-Hung Chen,<sup>8</sup> Gwendolyn F. Elphick,<sup>9</sup> Aisling Dixon,<sup>10</sup> Silvia Maina,<sup>11</sup> Susan E. Martin,<sup>12</sup> Debora Mesojedovas,<sup>13</sup> Dhanya Mukundan,<sup>14</sup> Chona F. Patalen,<sup>15</sup> Sangita P. Patil,<sup>16</sup> Meenakshi P. Subramanian,<sup>17</sup> Lin Wang,<sup>18</sup> Niall Harrison<sup>19</sup>

1. Bristol Myers Squibb, Uxbridge, UK; 2. Centre for Statistics in Medicine, University of Oxford, and EQUATOR Network UK Centre, Oxford, UK; 3. Dartmouth Institute for Health Policy & Clinical Practice (TDI), Geisel School of Medicine, Dartmouth College, NH, USA; 4. Bristol Myers Squibb, NJ, USA 5. Computable Publishing LLC, Scientific Knowledge Accelerator Foundation, MA, USA; 6. OPEN Health, Parsippany, NJ, USA; 7. Freelance medical writer, India; 8. Vercentrys Pte. Ltd, Singapore and Taiwan; 9. Parexel Inc NJ, USA; 10. Synergy, London, UK; 11. Editamed srl, Torino, Italy; 12. PharmaWrite Medical Communications LLC; Princeton, NJ; 13. Philip Morris International R&D, Neuchatel, Switzerland; 14. IQVIA India PVT LTD; 15. Department of Science and Technology - Food and Nutrition Research Institute, Taguig City, Metro Manila, Philippines; 16. SIRO ClinPharm PVT. LTD, India; 17. Envision Pharma Inc, Fairfield, CT, USA; 18. John Wiley & Sons, Hoboken, NJ, USA; 19. OPEN Health Communications, Marlow, UK

## BACKGROUND

- ACCORD (ACcurate Consensus Reporting Document) is a reporting guideline designed to be applicable to all consensus methods in biomedical research and clinical medicine.<sup>1</sup>
- We aimed to assess whether the ACCORD checklist was understandable and easy to use for medical publication professionals, editors, researchers and policymakers.

## METHODS

- WG, MG and NH developed a survey to rate the ease of understanding of the 35 ACCORD checklist items and the overall complexity of the checklist using a 5-point Likert scale (1=difficult, 5=easy).
- Volunteers were sought via an email invitation sent by ISMPP to its members, the ACCORD website, and social media channels. The target sample size was initially set at 5-10 volunteers. We asked whether the respondents would be interested in testing the checklist during the write up of a current manuscript describing a consensus exercise.
- An eligibility survey using Microsoft Forms collected information about respondents' background, the nature of the study they were writing up.
- Once included, respondents rated the 'ease of understanding' ratings for each item in the ACCORD checklist. They could optionally add comments to explain their score for each item.

## RESULTS

- Forty-six volunteers responded the eligibility form from July 25 to 26, 2023. Due to the interest in the work, the target sample size was expanded to 15 volunteers.
- The first 15 eligible responders were sent a link to the main survey open from July 28 to August 31, 2023; two reminder emails were sent on August 17 and 29, 2023.
- In total, 14/15 volunteers completed the survey. Most respondents (Table 1) were publication professionals (11/14, 78.6%) writing clinical recommendations (9/14, 64.3%) using Delphi (or modified Delphi) methodology (8/14, 57.1%).

**Table 1: Characteristics of responders and publications drafted by participants (n=14)**

| Professional background                        | n (%)     |
|--|-----------|
| Publication professional                       | 11 (78.6) |
| Journal editor                                 | 1 (7.1)   |
| Clinical informatics & Standards development   | 1 (7.1)   |
| Researcher                                     | 1 (7.1)   |
| Type of study being written up for publication |           |
| Clinical recommendations                       | 9 (64.3)  |
| Establishing research priorities               | 2 (14.3)  |
| Public health or community research            | 1 (7.1)   |
| Standard terminology                           | 1 (7.1)   |
| Health policy                                  | 1 (7.1)   |
| Type of consensus publication                  |           |
| Delphi study (or modification)                 | 8 (57.1)  |
| Nominal group technique                        | 2 (14.3)  |
| Informal meeting                               | 2 (14.3)  |
| RAND-UCLA appropriateness                      | 1 (7.1)   |
| New method for terminology development         | 1 (7.1)   |

**Table 2: Ease of understanding of ACCORD checklist items on a scale of 1 (difficult) to 5 (easy)**

Mean rating score: ■ ≥4.5 ■ 4 to <4.5 ■ 3 to <4 ■ <3

| ACCORD Checklist item  | Mean |
|--|------|
| T1 - Identify the article as reporting a consensus exercise and state the consensus methods used in the title.   | 4.36 |
| I1 - Explain why a consensus exercise was chosen over other approaches.  | 4.43 |
| I2 - State the aim of the consensus exercise, including its intended audience and geographical scope (national, regional, global).   | 4.71 |
| I3 - If the consensus exercise is an update of an existing document, state why an update is needed and provide the citation for the original document.   | 4.71 |
| M1 - If the study or study protocol was prospectively registered, state the registration platform and provide a link. If the exercise was not registered, this should be stated.                                     | 4.07 |
| M2 - Describe the role(s) and areas of expertise or experience of those directing the consensus exercise.  | 4.43 |
| M3 - Explain the criteria for panelist inclusion and the rationale for panelist numbers. State who was responsible for panelist selection.   | 4.64 |
| M4 - Describe the recruitment process (how panelists were invited to participate).   | 4.57 |
| M5 - Describe the role of any members of the public, patients, or carers in the different steps of the study.  | 4.50 |
| M6 - Describe how information was obtained prior to generating items or other materials used during the consensus exercise.  | 4.71 |
| M7 - Describe any systematic literature search in detail, including the search strategy and dates of search or the citation if published already.  | 4.50 |
| M8 - Describe how any existing scientific evidence was summarized and if this evidence was provided to the panelists.  | 4.43 |
| M9 - Describe the methods used and steps taken to gather panelist input and reach consensus (for example, Delphi, RAND-UCLA, nominal group technique).   | 4.79 |
| M10 - Describe how each question or statement was presented and the response options. State whether panelists were able to or required to explain their responses, and whether they could propose new items.         | 4.57 |
| M11 - State the objective of each consensus step.  | 4.29 |
| M12 - State the definition of consensus (for example, number, percentage, or categorical rating, such as 'agree' or 'strongly agree') and explain the rationale for that definition.                                 | 4.64 |
| M13 - State whether items that met the pre-specified definition of consensus were included in any subsequent voting rounds.  | 4.43 |
| M14 - For each step, describe how responses were collected and whether responses were collected in a group setting or individually.  | 4.79 |
| M15 - Describe how responses were processed and/or synthesized.  | 4.79 |
| M17 - If applicable, describe how feedback was provided to panelists at the end of each consensus step or meeting.   | 4.57 |
| M18 - State whether anonymity was planned in the study design. Explain where and to whom it was applied and what methods were used to guarantee anonymity.   | 4.43 |
| M19 - State if Steering Committee was involved in the decisions made by the consensus panel.   | 4.57 |
| M20 - Describe any incentives used to encourage responses or participation in the consensus process.   | 4.50 |
| M21 - Describe any adaptations to make the surveys/meetings more accessible.   | 4.50 |
| R1 - State when the consensus exercise was conducted. List the date of initiation and the time taken to complete each consensus step, analysis, and any extensions or delays in the analysis.                        | 4.71 |
| R2 - Explain any deviations from the study protocol and why these were necessary.  | 4.36 |
| R3 - For each step, report quantitative (number of panelists, response rate) and qualitative (relevant socio-demographics) data to describe the participating panelists.   | 4.00 |
| R4 - Report the final outcome of the consensus process as qualitative (for example, aggregated themes from comments) and/or quantitative (for example, summary statistics, score means, medians and/or ranges) data. | 4.71 |
| R5 - List any items or topics that were modified or removed during the consensus process. Include why and when in the process they were modified or removed.   | 4.64 |
| D1 - Discuss the methodological strengths and limitations of the consensus exercise.   | 4.64 |
| D2 - Discuss whether the recommendations are consistent with any pre-existing literature and, if not, propose reasons why this process may have arrived at alternative conclusions.                                  | 4.79 |
| O1 - List any endorsing organizations involved and their role.   | 4.71 |
| O2 - State any potential conflicts of interest, including among those directing the consensus study and panelists. Describe how conflicts of interest were managed.  | 4.57 |
| O3 - State any funding received and the role of the funder.  | 4.64 |

D, Discussion; I, Introduction; M, Methods; Other information; R, Results; T, Title

- Median understandability of items was 5.0; no item had a mean understandability <4.0; and over two-thirds (24/35, 68.6%) had a mean understandability ≥4.5 (Table 2).
- Free-text comments (n=95) most commonly related to items about the title (T1, n=9) or introduction (I1 and I2; both n=5).
- Time estimates for completion of the checklist for future consensus manuscripts were: <60 minutes (6/14, 42.9%); 60-120 minutes (6/14, 42.9%); >120 minutes (2/14, 14.3%).
- Most participants (10/14, 71.4%) rated ACCORD as less complex than other reporting checklists.

## CONCLUSIONS

- The ACCORD checklist was well understood and the ease of use was similar to other established checklists.
- The feedback from this implementation study has informed the forthcoming ACCORD Explanation and Elaboration document.

### REFERENCE

1. William T. Gattrell, Patricia Logullo, Esther J. van Zuuren, Amy Price, Ellen L. Hughes, Paul Blazey, Christopher C. Winchester, David Tovey, Keith Goldman, Amrit Pali Hungin, Niall Harrison. ACCORD (ACcurate Consensus Reporting Document): A reporting guideline for consensus methods in biomedicine developed via a modified Delphi. medRxiv 2023.08.22.23294261; doi.org/10.1101/2023.08.22.23294261.

### ACKNOWLEDGMENTS

The authors thank ISMPP for assisting with recruiting volunteers for this study.

### DISCLOSURES

WTG is an employee of Bristol Myers Squibb. PL is a member of the UK EQUATOR Centre, Oxford, UK, an organization that promotes the use of reporting guidelines, many of which are developed using consensus methods, and she is personally involved in the development of other reporting guidelines. Debora Mesojedovas is an employee of Philip Morris International R&D, Switzerland. Dhanya Mukundan, AP, AD, VC, LW and CFP report no conflicts of interest. MG was previously an intern at Bristol Myers Squibb. BSA has a financial interest in Computable Publishing LLC which produces consulting, software, and hosting for communication of scientific knowledge. ECB and NH are employees of OPEN Health. BYHC is a founder and employee of Vercentrys Pte Ltd. GFE is an employee of Parexel. SM is a co-owner of Editamed srl. SEM is an employee of PharmaWrite Medical Communications, LLC. SPP is an employee of SIRO Clinpharm. MPS is an employee of Envision Pharma.



www.ismpp.org/accord

