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Background and context – the need for White Paper consensus materials:

Promoting the highest quality, evidence-based research across Europe is a priority of the European Stroke Organisation (ESO). ESO have used clinical practice guidelines as a vehicle to raise standards and ensure consistency in practice. The ESO Guideline Board develops various products, all intended to support clinical decision-making in stroke care: clinical practice guidelines [1], expedited recommendations [2], and collaborative guidelines with other professional societies (joint guidelines or endorsement)[3]. All these materials are predicated on the availability of robust research to inform an evidence-based recommendation.

There are many aspects of stroke care where robust scientific evidence may not be available or may be difficult to obtain. Examples include, but are not limited to, novel therapeutic areas where the published evidence is not yet mature enough to support a recommendation, rare conditions where adequately powered studies are improbable, or clinical questions in populations who have traditionally been excluded from randomised trials.[4] In these situations, the clinical community are keen for guidance, but the standard clinical practice guideline format will not be suitable.

Expert consensus can be a useful tool in situations where no robust evidence is available, opinions are divergent, or collective judgement could aid in an area of equipoise. Consensus approaches allow the knowledge and experience of multidisciplinary thought leaders to be utilised to produce practical guidance in high-value clinical topic areas.

Recognising the potential for consensus guidance, ESO have responded in two ways. ESO have produced reviews under a collective title of White Papers.[5,6] These reviews have been well received, but there is inconsistency in the methods used and the format of guidance produced.

In parallel, ESO guidelines allow for an Expert Consensus Statement.[7] The statement is formulated through discussion and then formalised by voting amongst module working group (MWG) members. These statements have been a useful addition to ESO Guidelines, but their intention is to complement formal evidence-based recommendations, rather than be the sole guidance offered. There are many examples of practice areas where the lack of evidence would mandate that no evidence-based recommendations could be formulated. The current ESO Guideline format and Standardised Operating Procedure (SOP) is not suited to such an offering.[7]

Thus, we have an important gap in the extent of recommendations we can offer to clinicians. There is a recognised need for a new ESO product, that offers practical, consensus guidance in an area where evidence is lacking; and that is produced following robust, consistent, and transparent methods. This SOP outlines the approach that we will take to produce ESO White Papers (Expert Consensus Based Clinical Guidance).
Methods for producing White Papers:

ESO Guidelines already benefit from an established and effective SOP.[7] Where possible, the methods for producing a White Paper will follow the process outlined in the generic SOP. However, there will be aspects of method and reporting which necessarily deviate from the SOP. These will be highlighted in this document.

In developing our approach to consensus based materials, we reviewed relevant literature. We collated best practices in clinical consensus building[8], and reviewed consensus documents from other professional societies and guideline producers, to create a format that suits the need of the ESO community. There are various terminologies for clinical guidance from professional societies.[9] We have chosen the descriptor White Paper as this seems aligned with our intention of offering expert guidance on differing facets of a high value clinical topic area.

Initial methods for a White Paper including the choice of chairs for the guideline, the formulating of the module working group, the creation of PICO questions and the preliminary search will be common to generic SOP. (Figure 1)

Figure 1: Flow chart of the process of the ESO White Papers. ESO: European Stroke Organisation, GC: Guidelines Committee, MWG: Module Working Group; EC: Executive Committee. *Possibility to choose a White Paper format instead of a standard guideline if it becomes clear that there is insufficient evidence for evidence-based recommendations after preliminary literature scoping.
If it has not already been decided at the initiation of the work whether a paper would be suited to the White Paper format, it may become clear after literature searching that there are insufficient materials available to support evidence-based recommendations for the chosen PICO questions. The final choice of whether to pursue a standard ESO Guideline or a White Paper will be made by the MWG chairs in discussion with the Guideline Board. If the final guidance is likely to have less than one fifth of PICOs supported by an evidence-based GRADE recommendation, then the White Paper format may be preferable. We believe the approach suggested is a reasonable trade-off between prioritising evidence-based recommendations while accepting that sometimes these are not possible.

In making choices around commissioning, or supporting, White Papers, it should be noted that the primary output of the ESO Guideline group should remain traditional Guidelines that follow the standard SOP.

**Evidence synthesis for White Papers:**

Although the intention with a White Paper is not to produce an evidence-based recommendation, there is still a need for the expert consensus to be based on the evidence that is available. Thus, relevant papers will be collated as part of the initial literature search. In addition to usual evidence sources, when a decision is made to pursue a White Paper, the search will be expanded to include high quality reviews on the topic and any consensus statements published by other professional societies. These will be shared with the MWG to inform the creation of draft guidance statements.

**Methods for producing White Paper consensus statements:**

A common criticism of consensus materials is a lack of rigor and transparency around the consensus setting process.[10] Here we will detail a standardised approach to consensus development. We will allow module MWGs a degree of flexibility, but any deviation from the methods described here will need to be described and justified. Ultimately the final document must include a description of the consensus statements’ development with sufficient detail to allow complete independent process replication.

We recognise that the process of consensus outlined here differs from that used in the standard ESO Guideline SOP.[7] We believe the increased level of rigor required for a White Paper consensus versus a Guideline opinion statement is appropriate as the White Paper is based solely on expert opinion.

The formulation of expert consensus statements for ESO White Papers will follow a two stage process. In the first stage the MWG will develop a series of draft statements. These will be based on the PICO formatted clinical questions agreed by the MWG. In an open meeting, the committee will review the evidence from literature searching, discuss their own current practice, and describe what they believe to be best clinical practice. A list of preliminary statements relevant to each PICO question will then be drafted by the MWG. An emphasis should be placed on practical and clinically relevant advice. In the second stage these draft recommendations will be assessed and revised using a modified Delphi process as described below.
The modified Delphi process: ESO committees are formulated and run with an ethos that all members have equal status. However, evidence suggests that, in many situations, some group members may not feel confident to give their views in an open forum. Equally, individuals may be unwilling to retract long-held views, or to voice opinions that contradict current practice. In contrast, other more confident group members may, consciously or inadvertently, dominate discussion. This can create a situation where recommendations are biased towards the opinions of select group members.[11] For these reasons, our approach to achieving consensus will use a modification of the Delphi technique with a secret ballot conducted at each round of voting.

The Delphi panel will rate each draft statement based on what they believe represents ‘best clinical practice’. For this rating, a 9-point Likert scale will be used, with levels from 1 ‘strongly disagree’, through 5 ‘neither agree nor disagree’, to 9 ‘strongly agree’. All members will be encouraged to vote but an option to abstain from voting due to insufficient knowledge will be offered. In addition to the Likert rating, respondents will be given opportunity for free text comments on wording of statements and in the first round of voting will have the option to propose new guidance statements.

After each round of voting, the central ESO administrative team will collate responses, calculate overall percentage agreement and summarise the written feedback. Ratings will be categorised, where scores of 1-3 will be classed as ‘disagree’, 4-6 ‘equipoise’ and 7-9 ‘agree’. Thresholds to define consensus agreement and rejection will be pre-defined by the MWG prior to the voting. A threshold of 80% agreement is often used to indicate group agreement, while a threshold of less than 50% would suggest that the statement should be discarded from further rounds of voting, unless the written feedback offers modifications that could improve consensus.[8]

Each statement will have a minimum of two rounds of voting, even if ‘consensus’ is reached on first round. This allows for iteration between rounds and for panellists to reconsider their voting in light of others anonymous votes and comments. Where the wording of a statement has been substantially altered following feedback, this will be considered a new item. Items achieving agreement in first round, but not second round will be labelled as ‘unstable agreement’ and will require a minimum further round of revision. All voting members will receive a summary of any wording changes that resulted from the feedback.

After the voting, all remaining statements will be re-drafted, based on feedback and then resubmitted for a further voting round. The process will continue until all statements have agreement or have been rejected. Based on experience with other consensus exercises, the anticipation is that three rounds of voting should be sufficient. At a final open module working group meeting the agreed statements will be discussed and minor modifications can be made to wording.
Figure 2: Flow chart of the modified Delphi process

First stage

PICO questions agreed by the MWG

- Review of the literature
- Discussion in the MWG of their current practice

Draft statement regarding each PICO question

Second stage

Rating of each drafted statement by the Delphi panel

- < 50% agreement
- Consensus reached (> 80% agreement)

Redrafting of the statement

Discarding of the statement

The modified Delphi process will continue until all statements have agreement or have been rejected
Formulating the modified Delphi group:

For standard ESO Guidelines, the MWG consists of up to 10 voting members. The core MWG for a White Paper should be of equivalent size. However, best practice in Delphi consensus is that the voting panel should be large enough to allow for a spectrum of viewpoints. Thus, a group larger than the MWG will assist with the voting. This group will be referred to as the Delphi panel.

The MWG will have the opportunity to vote on draft statements, but additional Delphi panel members will be invited to participate also. These specific Delphi panellists will only assist with the voting and will have no role in other aspects of drafting the White Paper. There are no generally agreed standards for Delphi panel size and a range of 20–30 participants is common.[12] For ESO White Papers a minimum of 20 active voters will be required.

To ensure diversity in the Delphi panel, we propose a multimodal recruitment process. MWG Chairs will suggest members for the Delphi group, MWG members will also be encouraged to nominate potential Delphi group participants. The ESO website will host an open call for Delphi group volunteers specific to a topic, and if needed, the ESO Guideline Board will use their contacts to ensure sufficient (minimum 20) voting numbers are achieved. If there are more applicants than the maximum group number preferred by the MWG Chairs than the Chairs will have final choice of participants.

A minimum of 10 years clinical experience will be a requirement for all participants and MWG Chairs may set other topic specific criteria. We will collate information on specialty, geographic location, career stage, and demographics for both MWG members and Delphi panellists. Although no formal targets will be established, MWG Chairs should endeavour to ensure a broad spread of representation.[13]

Delphi panellists will not be reimbursed for their time. Inclusion of stroke survivors or others with lived experience can be considered but is not mandatory.
Reporting format of White Papers:

Reporting will follow best practice using the ACCORD (ACcurate COnsensus Reporting Document) reporting guidance.[14]

Title: The Title will take the format: European Stroke Organisation (ESO) White Paper on <insert topic> with a subtitle of ‘Expert Consensus Based Clinical Guidance’.

Introduction: The Introduction will define the topic area, including the need for guidance. This section should also justify why a formal consensus approach was taken and define the scope of the guidance offered.

Methods: Many aspects of the method reporting will be similar to the traditional ESO Guideline SOP. However, there are certain mandatory aspects of method reporting specific to the White Paper format:

- Criteria for selecting Delphi panellists and recruitment process.
- The choice and justification of thresholds that define group consensus (and rejection)
- All the materials shared with group prior to formulating the question(s) and voting on consensus statements should be described (for example consensus statements from other guidelines, topic reviews, any available evidence).
- The composition of the Delphi voting group.
- Any deviation or modification of the standard process outlined here should be described and justified.

Results: To show that White Papers are distinct from standard clinical practice guidelines the formatting of results will not use GRADE style templates. To allow for comprehensive and transparent descriptions of the iterative process that informed a consensus statement, the Results section should include a flow chart illustrating the stages of the process, including initial MWG meetings to plan statements, rounds of voting, and internal/external review of the White Paper statements.

Results for each voting round should be reported separately in the main document or appendix. This includes figures showing the average group response, changes in text between rounds, and any free text comments or feedback.

Consensus does not necessarily imply the ‘correct’ answer, and lack of consensus and stable disagreement can equally provide insights and highlight important differences in perspectives concerning the topic. Those statements where no agreement could be reached will be included as an appendix as these may represent areas with greatest need for new evidence production.

The presentation of Results for statements with varying agreement is outlined in Figures 3a,b,c.

Discussion: The Discussion section should include critical reflection on the strengths and limitations of the consensus guidance.
Authorship on White Papers:

The Chairs, MWG and methodologists will all be offered authorship on the White Paper, subject to sufficient participation in the production of the guidance as defined by the International Committee of Medical Journal Editors.[15] Delphi participants will be acknowledged in any resulting materials, but will not automatically qualify for authorship. A list of the names and affiliations of all who participated in the Delphi voting group will form a supplement to the White Paper.

Updates to White Papers:

ESO Guidelines have an agreed SOP for regular updating of clinical practice guidelines. For White Papers, due to the nature of the topic areas, and the unpredictable availability of evidence, mandatory updating at regular intervals will not be expected. However, where new evidence becomes available, a consensus based statement should be revised to the format of an evidence based recommendation. In this scenario the White Paper will be retired and replaced by a clinical practice guideline, following the usual process for a guideline update.

Disclaimer:

All White Papers, and other outputs based only on consensus, will have the following disclaimer:

In the absence of robust evidence, the clinical guidance offered here is based on group consensus. ESO White Papers strive to offer practical clinical suggestions, but these are not evidence based guideline recommendations and should not be considered mandatory. Clinicians should choose how to use the suggestions contained in a White Paper in the context of the individual patient. ESO accept no liability if the actions suggested are associated with harm or unintended consequences.
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<tr>
<th><strong>PICO Question:</strong> For European stroke clinicians does use of White Paper consensus documents improve patient outcomes?</th>
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<tbody>
<tr>
<td><strong>Consensus statement:</strong> A panel of multidisciplinary stakeholders agreed that: <em>use of White Papers could be considered to improve stroke patient outcomes</em></td>
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<td>No. of voting participants</td>
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<tr>
<td><strong>Consensus statement:</strong> A panel of multidisciplinary stakeholders were: <em>unable to reach agreement on the utility of White Papers to improve stroke patient outcomes</em></td>
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**Figure 3:** Examples of presentation of differing results from the Delphi process.
References


15. International Committee of Journal Editors Guidance on Authorship
https://www.icmje.org/ Last accessed Feb 2024