

European Resuscitation Council Guideline 2025 (ERC GL2025)

1. Scope of the ERC GL2025 and purpose of the document

This document shall clarify the procedures and rules how the ERC develops the ERC GL205. It is based on the very indirect guidance from the current Internal Rules and the Articles of Association (www.erc.edu/about), a document "ERC Guidelines 2020 process", an advice document from the ERC Governance Committee (GC) (31.1.2024), recommendations from the Guidelines International Network (GIN; https://g-i-n.net), and the International Committee of Medical Journal Editors (ICMJE) guidance for authors and contributors (www.icmje.org).

Quoting the GC: "The ERC GL2025 will be robust and of high quality, led and written by known experts in the subject, maintaining the ERC as the lead authority in resuscitation in Europe (and surroundings)."

Therefore, the ERC will produce clinical practice guidelines for use by the public, decision-makers and stakeholders, community first responders healthcare professionals and healthcare institutions. The ERC General Assembly (GA) agreed in July 2023 on the format of how the ERC GL2025 will be presented and disseminated (Appendix A)

The ERC Director of Guidelines and ILCOR is mandated to coordinate and guide the ERC Guidelines 2025 process, and he must retain the ability to modulate recruitment to the GL2025 writing Groups as Chair of the Steering Committee.

The initiation of the ERC GL2025 process was announced on 19 December 2023 for January 2024 at the ERC web page (www.erc.edu/launch-of-erc-guidelines-2025) and LinkedIn (https://shorturl.at/emoGJ) with a contact address. Following the suggestions from the ERC Office communication specialists and the GC, further information will be sent out via the ERC newsletter, the platform LinkedIn, and e-mails, to enhance open communication about the GL2025 development process for interested ERC members and external experts who like to participate as experts in case they qualify as writing group members.

The Chapters agreed by the GA in June 2023 are:

- 1. Executive Summary
- 2. Epidemiology of resuscitation
- 3. Systems Saving Lives
- 4. Basic Life Support (adults)
- 5. Advanced Life Support (adults)
- 6. Paediatric Life Support (basic and advanced)
- 7. Neonatal Life Support



- 8. Special Circumstances in resuscitation
- 9. Post Resuscitation Care
- 10. Education of resuscitation
- 11. Ethics in resuscitation
- 12. First Aid

The Board will appoint the ERC GL2025 Steering Committee and the chapters writing group leads. Writing group members will be appointed by the Steering Committee.

2. ERC GL2025 Steering Committee

An ad hoc Steering Committee was composed in December 2023, chaired by the Director Guidelines and ILCOR. The Steering Committee is accountable to the ERC Board. Members were selected by functions within the ERC, diversity and development efforts within the ERC, but overall, on competences in science and publishing, clinical expertise and leadership, including one mentee.

All members need to provide their COI, and all are ERC members in good standing. No Steering Committee member should have a major COI.

Members are:

Co-Chair Robert Greif (Director Guidelines & ILCOR) Education, Spec. Circumst.

Co-Chair Gavin Perkins (Director Science)

Jerry Nolan (Resuscitation Journal Editor)

Nikolaos Nikolaou (international contacts)

Theresa Olasveengen (BLS and ILCOR)

BLS, Epidemiology

ALS, Post Resusc. Care

Systems, Post Resusc. Care

Joyce Yeung (ICU researcher)

Therese Djärv (First Aid ILCOR)

Natasa Spartinou (YERC mentee)

ALS, Education

First Aid (FA), Ethics

BLS, Special Circumst.

Koen G. Monsieurs (ERC Chair)

Federico Semeraro (Chair-elect),

Kasper G. Lauridsen (PLS, Education)

Systems, Ethics

PLS, Ethics

Vix Monnelly (NLS, mentee) NLS

Office Project Manager: Marlie van Gils.

To keep the Committee functional 12 members are considered more than enough to guide and supervise the ERC GL2025 process. Therefore, in contrast to the GL2020 committee, leaders of the writing groups were not invited to allow them full concentration on the development of their chapter of the evidence-informed ERC GL2025.

At least monthly meetings of the GL steering committee are scheduled, and monthly updates with the writing group leads are planned to follow up and update the ongoing process within the corresponding chapter writing groups.

The GC needs to be able to judge the GL2025 process independently, and is therefore not present at meetings of the Steering Committee.

The tasks of the Steering Committee (SC) are (in agreement with the GC):



- The SC specifies the process for including expert contributors from 'sister' organisations based on measurable criteria (e.g. Medline citations, h-factor, i-Cite RCR). These experts need to be official delegates representing these societies in the ERC GL2025 development process. The ERC is seeking a Memorandum of Understanding (MoU) with these societies to formalize that collaboration.
- SC members are in all writing groups in the function of members of that writing group and as members of the SC coordinating, supporting and supervising the contributions of the writing groups to the GL2025 process.
- The SC supervises the composition of the writing groups and their progress of the GL2025 development, as well as the contribution of the writing group members. It helps in identifying difficulties and supports remedies.
- The SC coordinates the chapter development and writing process, and is responsible for producing the G2025 Executive Summary, in collaboration with the lead authors.
- The SC defines the GL2025 milestones (see below) and assesses achievements.
- The SC is responsible for the contact with collaborating societies together with the Office.
- The SC takes care of COI issues.
- The SC is responsible for the proofreading and uniting the doctrine over all chapters (uniform language in the entire document).
- The SC collaborates with the Office for the development of a dissemination plan and promotion activities for the ERC GL2025.
- The SC deals with requests, difficulties and challenges during the ERC GL2025 process.

3. ERC GL2025 Writing Groups

As the GC pointed out correctly "there is no process in place for appointment to the Writing Groups", a selection plan to constitute the GL2025 writing groups was formulated to satisfy the advice of the GC: "It is the individual's capability that is the essential quality. There is no place for opportunistic 'tourist' co-authors".

The core principles for composing the writing groups and its leaders are:

- Membership of the ERC is a pre-requisite for all ERC GL2025 writing group members, except for invited contributors from 'sister' organisations.
- The Office will send an official letter of invitation to all proposed ERC GL2025 writing group members (letter Appendix B). The letter will inform about the expectations, timeline, and needed commitment, and will formalize the working relationship with the ERC once the person has accepted the invitation.
- There should be no major COI and all need to sign a non-disclosure agreement (Appendix C).
- The ERC GL2025 Steering Committee proposes the writing group leaders (Appendix D) and the ERC Board appoints them.



- The leaders of the writing groups proposed come from the respective SECs, international well-recognized experts in the field, and ERC members with exceptional active contributions in ILCOR or other ERC bodies.
- Writing group leaders outside of SECs (e.g. ethics, special circumstances, first aid)
 will be recruited from active contributing ERC members, ERC members actively
 involved in ILCOR, or members of former GL writing groups.
- Whenever feasible, ERC GL2025 writing group membership will be based on measurable expertise and experience of proposed recognized experts in the field (e.g. Medline citations, h-factor, i-Cite RCR)
- The proposed leaders of the writing groups issue a list of possible members of the writing group experts, to be appointed by the Steering Committee.
- Established international experience in the subject of the guidelines chapter is essential for writing group members. Including engaged ERC members with GL development evolving experience (mentees) is highly encouraged recognizing the need to mentor less experienced authors for future guideline development.
- Each GL writing group needs to decide how many people are needed to develop the GL and to perform their task in a timely manner. This will vary depending on the subject of the chapter.
- To satisfy constant efforts on diversity, writing group members should be subject and methodology experts being physicians, nurses, paramedics, resuscitation scientists, and early/mid-career researchers as mentees from all genders and ethnic groups, geographically balanced across Europe. Whenever feasible resuscitation experts from lower resource settings should be invited too. However, overrepresentation of any group (profile, institution, region, NRC) must be avoided.
- Representatives of key stakeholder organisations will be invited as long as they are
 official representative of these organizations with a mandate of collaboration with
 the ERC GL2025 process. These invitations will be handles by the Steering Committee
 together with the ERC Office.
- Representation from cardiac arrest survivor groups or laypersons/patients organizations might be invited to specific writing groups whenever feasible. Consulting such groups or individuals is also possible (incl. COI and confidentiality) and substantial contribution will be acknowledgement as collaborator of the guideline.
- The core task of the writing groups is to write the evidence-informed ERC guidelines 2025. These are based on the ILCOR CoSTRs, evidence evaluation from the writing groups (systematic, scoping, and narrative reviews, evidence updates, good practice statement derived from expert opinion consensus, etc.). That shall include patient or survivor perspective, as well as considerations of application of recommendations or implementation in lower resource settings and remote areas (Appendix E). Experts in such settings might be consulted on specific topics (incl. COI and confidentiality). Substantial contributions to the guidelines will be acknowledge as collaboration.



- The final co-authorship of the GL2025 chapters will follow international rules of publication, and depend on the level of contribution of the writing group leaders, members and mentees. Shared first and last co-authorships are possible, including mentees.
- The contribution of authors of the ERC Guidelines 2021 will be acknowledged as collaborators in the GL2025, unless they are a member of the GL2025 writing group.

4. Conflict of Interest, confidential procedures, financial relationships

Conflict of interest (COI) will be managed according to the ERC policy for COI. Members of the Steering Committee and writing group members will complete an annual COI declaration. The Governance Committee will review the COI declarations and prepare a report for the ERC Board. Conflict of interest will be reported in the relevant guideline document.

Members of the Steering Committee and writing group leaders cannot have a major COI and should be free of commercial COI. Having declared a COI, a writing member may still participate in discussions that relate to this topic, but should not be involved in decisions. In some circumstances, it may be appropriate to exclude that person from the whole discussion. This refers to COI with financial support from companies (speaker, travel, research, compensation) or financial relationship with company: owner, shareholder, they receive a salary. Such declarations do imply a possible conflict of interest and should be mentioned in the guidelines publication. Those in charge of the writing groups will be informed about those COIs in order to be able to take measures if necessary (such as exclusion from discussion or decisions).

The ERC has financial relationships with business partners who support financially the ERC. (www.erc.edu/business-partners). The development of the ERC guidelines occurs entirely independently from the influence of business partners.

The Guidelines are supported by the ERC, which is a non-profit organisation in accordance with the Belgian Law of 27 June 1921. A budget is set by the ERC Board to support the Guideline Development Process.

One of the official journals of the ERC is *Resuscitation*, an international peer-reviewed journal published by Elsevier. The Editor in Chief maintains the editorial independence of the journal and sits on the ERC Board. The ERC GL2025 will be published in *Resuscitation*.

5. ERC GL2025 Milestones

- Dec 2023: Establishing the ERC GL2025 steering committee monthly meetings
- Jan 2024: start of the GL2025 process proposal of the writing group leaders
- 12 February 2024: ILCOR Task Force Chair + Writing Group Chairs Call communicating evidence evaluation PICOST for 2025



- End of Feb 2024: Writing Group members confirmed (incl. COI, confidential agreement) incl. "sister organisations" contact and delegates established
- End of March 2024: Scope of the GL2025 chapters writing groups defined needed SyR, ScR, EvUp not covered by ILCORs CoSTR for the GL2025 and reviewed by ERC groups.
- April until Dec 2024: WG Evidence assessment to gather the evidence for the GL2025
- Second half of 2024: preparations and planning of ERC productions with the Office (dissemination plan, graphics, web presence, social media, posters, general information folders, ERC printing and translation, collaboration with Elsevier Resuscitation)
- January March 2025: Writing groups finalize chapters
- April May 2025: Steering Committee finalizing ERC Guidelines 2025 review and revisions by the writing groups
- June 2025: public comments and approval by the ERC GA + "sister" organizations
- July October 2025: Production by Elsevier Resuscitation incl. revision and corrections. National Resuscitation Councils can translate ERC guidelines for use locally (Board decision needed, and if local modifications are allowed).
- October 2025 ERC Guideline Conference launching of the 2025 Guidelines
- October December 2025: translations, where needed

Jan '24 - Feb '24	Feb '24 Mar '24		- Jul '24	Α	Aug '24 - Dec '24		
Formation writing groups	Scope of the GL2025 chapters & topics reviewed by ERC groups	Evidence assessment (systematic review, scoping review, evidence update, etc.)					
		Preparation of GL202			on of GL2025 m	aterial &	
		dissemination					
Jan '25 - Mar '25		Apr '25 - May '25	Jun '25	Jul '25 - Sep '25	Oct '25		
Writing of the chapters		Review (Steering Committee) & revision (writing groups)	Public comments, Board & GA signs off	Production by Elsevier	Publication GL2025 in Resuscitation		



Appendix A: Information material presented in 3 alternative layouts. GA agreed in June 2023

- Infographic the essential in one folder (4 6 pages) chapters to be defined
 Aim is to inform every interested person about the respective topic. A broad
 information aiming for lay persons (Information for every European citizen), create
 awareness and interest to seek further education in resuscitation.
 Broadest dissemination possible a team of graphic design specialists needed.
- 2. The summary for stakeholders a small booklet 10-15 pages The aim is to provide all health care settings the needed guidance/ up-date to implement resuscitation services delivering high quality resuscitation attempts to cardiac arrest victims by proper trained practitioners. Written text and graphics. If ever possible linked to interactive program on CoSy (expertise needed).
- 3. The guideline book the classic publication in Resuscitation containing all the science behind all the recommendations and suggestions on resuscitation in 2025 divided to the given chapters.

Aim is to inform in details interested scientist and practitioners about the background of the procedures and implementations.

Chapters:

- 1. Executive Summary
- 2. Epidemiology of resuscitation
- 3. Systems Saving Lives
- 4. Basic Life Support (adults)
- 5. Advanced Life Support (adults)
- 6. Paediatric Life Support (basic and advanced)
- 7. Neonatal Life Support
- 8. Special Circumstances in resuscitation
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- 12. First Aid



Appendix B: ERC GL2025 Writing Group Invitation Letter

Niel (Belgium), 15th of January 2024

Dear **

ERC Guidelines 2025: invitation to join the writing group for the chapter - xxxxxxxxxx

In 2021 the European Resuscitation Council (ERC) published its latest guidelines on resuscitation. These were evidence based including work from ILCOR and the ERC guideline writing groups. Over the years, the ERC guidelines on resuscitation became the standard in Europe with significant reach and impact in supporting clinicians, laypersons, hospitals, and emergency medical services as well as volunteer rescue services to deliver high-quality resuscitation across Europe. The guidelines are also the backbone of the ERC's educational programmes aiming to deliver high-quality resuscitation teaching and training.

The ERC is planning to update its Resuscitation Guidelines in 2025. On behalf of the Board of the ERC, we are pleased to invite you to become a member of the Guidelines 2025 writing group of the xxxxxxxxxx chapter and to author the ERC 2025 Guidelines. The list of the guideline chapters is provided below.

The work of the writing groups will start in February 2024. Their first task will be to define the scope of their 2025 quidelines chapter. Before deciding whether you are able to participate, please consider the roles and responsibilities of quideline authors, which is summarised at the end of this document, and sign the confidentiality agreement (it will be sent to you through the DocuSign platform).

If you are willing to participate, then please reply to <<u>quidelines@erc.edu</u>> by DATE.

Thank you for taking the time to consider this invitation. We hope you will be in a position to respond positively.

Best wishes

Robert T. Greif Director of Guidelines and ILCOR Koen Monsieurs Chair; ERC

Guidelines 2025 Chapters

Chapter 1: Executive summary

Chapter 2: Epidemiology

Chapter 3: Systems Saving Lives

Chapter 4: BLS and AED

Chapter 5: ALS

Chapter 6: PLS

Chapter 7: NLS

Chapter 8: Special circumstances

Chapter 9: Post Resuscitation Care

Chapter 10: Education

Chapter 11: Ethics

Chapter 12: First Aid

Chapter Leads (proposed)

G Perkins, R Greif JT Gräsner, E Baldi

F Semeraro, S Schnaubelt

M Smyth, G Perkins,

J Soar, N.N.

J Djakow, D Biarent

M Hogeveen, J Madar

C Lott, C Deakin

J Nolan, C Sandroni

S Nabecker, T de Raad

V Raffay, K. Lauridsen

T Djärv, F Semeraro



Roles and responsibilities of ERC Guidelines writing group leads and members

- Need to be active members of the ERC, except if they are delegates from a collaboration society.
- Can participate in up to two chapters of the ERC guidelines 2025 (except the executive summary).
- Assigned writing group leads propose the members of the writing groups, including younger resuscitation experts as mentees. The proposal will be approved by the Steering Committee.
- Provide clinical and scientific expertise to the guidelines writing group.
- Actively participate in the majority of guidelines writing group virtual or in-person meetings.
- Systematically review the published literature on specific topics as needed.
- Present review findings and lead discussions within the group on specific topics.
- Develop and refine clinical practice algorithms and guidelines.
- Fulfil the ICMJE requirements for authorship.
- Be prepared to be publicly accountable for the quidelines contents and promote their adoption.
- Comply with the ERC code of conduct and the conflict of interest policy.

Benefits of contributing as a writing group member

- Opportunity to influence resuscitation practice across Europe.
- Networking and collaboration with world leaders in resuscitation.
- High-level critique and comprehensive review of resuscitation science.
- Presentation of guidelines and an opportunity to serve as an ambassador for resuscitation.
- An intense learning experience and career opportunity for mentees.
- Authorship of a high citation guideline (citation counts 30-500 for each guideline).

Authorship

- All writing group members who fulfil the ICMJE criteria for authorship will be listed as authors for the relevant section of the guideline.
- Writing group leads will in addition be named as authors on the ERC Guideline Executive Summary with other writing group members being listed as collaborators.
- The order of authors will be determined by the writing group leads for that chapter in consultation with writing group members and the agreement with the steering committee.
- In the unlikely situation of any dispute about authorship, the ERC Guidelines Steering Committee will determine final authorship.

Anticipated time commitment

- Monthly virtual writing group meetings (more frequently if required by the writing group).
- Possibly in-person meetings at the ERC General Assembly or at the ERC Congress in case writing groups attend.
- Average of up to 3 hours per week over the duration of the project. Some periods (particularly the later phases) may require additional time.

Duration of appointment

The guidelines will only be successful if the writing group members all actively engage in the development of the guidelines. The writing group leads and ERC Guideline Steering Committee will review writing group members' contribution and performance on an on-going basis. Subject to satisfactory review, appointment will be from February 2024 to December 2025.



Appendix C: Confidentiality & Nondisclosure Declaration

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ERC Guidelines 2025 products:

Guidelines, Manuals, Learning Environment, Presentations, Posters, etc.

Hereafter called "The Documents"

Confidentiality - Nondisclosure - Author's rights

Version [30/01/2024]

To the European Resuscitation Council vzw, registered in Belgium with registration number 0461.204.217, hereafter called "ERC", I declare:

1. Confidentiality / Nondisclosure Agreement

I understand that when I participate in the writing process related to the creation of *The Documents*, all materials, data and information related thereto is embargoed. I therefore agree to keep any information related to draft of *The Documents*, including the fact itself that the ERC is creating *The Documents*, the writing process and any materials, data and/or other information strictly confidential. I will not disclose any of this information outside the working party involved in the creation of *The Documents*.

This confidentiality obligation does not pertain to information that belongs to the public domain.

Once *The Documents* are published by the ERC, *The Documents* are evidently no longer confidential, but the preparatory works remain confidential.

This confidentiality obligation does not apply to disclosure of information for which the CEO, or the Board of the ERC has explicitly given permission.



2. <u>Author's rights</u>

My contribution to *The Documents* is subject to the Belgian legislation on intellectual property.

I agree to transfer all the eventual, actual and future author's rights of my contributions to *The Documents* absolutely and indefinitely to the ERC, without any compensation due by the ERC. The ERC may use this, or any part of it, in its own publications, including, but not limited to, posters, flow charts, guidelines, learning environment and manuals. The transfer includes all features and rights, to their broadest extent, attached to the copyright (author's right) or similar rights (neighbouring right), including the right to reproduction and the right to communication to the general public, through any known or as yet unknown form of exploitation on the date of signing of the present document, whatever the technical means employed for its exploitation. This transfer is definitive, irrevocable, worldwide and for the complete duration of the copyright protection.

I will also assist the ERC in view of the defence and protection of any intellectual property rights related to *The Documents*, for instance by providing – whenever relevant – any useful document or explanation related to *The Documents*, as well as by completing any required formality.

I understand that I shall not be financially compensated by the ERC for the undertakings mentioned hereabove.

The present declaration is subject to the Belgian law and the Courts of Antwerp have exclusive jurisdiction in relation to any disputes resulting from it or in relation to it.

By signing this declaration and returning it to the ERC, I confirm my agreement with and acceptance of these conditions.

Understood and accepted by:1

^{1.}

 $^{^{1}}$ Please mention, in handwriting, your name, date and place of signing. Please also paragraph every previous page.



Appendix D: Leaders of the GL2025 writing groups

Chapter 1: Executive summary G Perkins (UK), R Greif (A) Chapter 2: Epidemiology JT Gräsner (D), E Baldi (I) Chapter 3: Systems Saving Lives F Semeraro (I), S Schnaubelt (A) Chapter 4: BLS and AED M Smyth (UK), G Perkins (UK) Chapter 5: ALS J Soar (UK), N.N. Chapter 6: PLS J Djakow (Cz), D Biarent (B) Chapter 7: NLS M Hogeveen (NL), J Madar (UK) Chapter 8: Special circumstances C Lott (D), C Deakin (UK) Chapter 9: Post Resuscitation Care J Nolan (UK), C Sandroni (I) Chapter 10: Education S Nabecker (A), T de Raad (NL) Chapter 11: Ethics V Raffay (Seb), K. Lauridsen (DK) Chapter 12: First Aid T Djärv (S), Federico Semeraro (I)

The names of the writing group members for each chapter are available in the document titled "List of Writing Group Members GL2025."



Appendix E: Guidance document for the development of the ERC GL2025

1. The formal process to come to evidence-informed decisions in a consensus process

Formal methods (like nominal group technique, Delphi or modified Delphi processes, or formal balloting) result in less biased but more evidence-based decisions than informal once. This guidance will clearly define a quorum and the consensus process.

- The ERC GL2025 are based on reviews from ILCOR, or the writing groups itself, and a
 result of an open and collaborative discussion of the evidence until consensus is
 achieved. To facilitate that process, the writing group chair must ensure that each
 individual on the writing group can present and debate their views, and that discussions
 are open and constructive.
- In case of limited or inconclusive evidence the decision for the GL2025 statements, needs to be made using a formal consensus process. A nominal group method might be used. The available treatment options are discussed and then ranked by all writing group members, as that allows the views of all the members to be taken into account.
- All members of the group need to agree to endorse any statement. In case no consensus
 is found, the Steering Committee can be involved and the final wording should include
 the uncertainty. The quorum to reach consensus will be at least 75% of the writing
 group members.

2. Establishment of the scope of the corresponding GL2025 chapter.

Each writing group will submit to the Steering Committee their scope of the corresponding chapter, which includes an overview of what will, and will not, be covered based on the ERC GL2021.

- That shall identify key issues to be addressed in a draft version to be submitted to the Steering Committee (see milestones).
- Stakeholders, patient survivor organisations, and "sister" societies can be consulted to help identify priority areas, areas from already existing guidelines that shall stay, or what is lacking.
- The final scope shall include: the overall objective of the chapter and the clinical, healthcare or social questions covered, the population and/or target audience and the healthcare setting to whom the chapter applies. A very brief summary of the methods available evidence was evaluated (e.g. systematic review, etc.), the time period covered by that evidence and any equality issues identified.
- The final scope and purpose will be approved by the GL2025 Steering Committee.

3. The methods used to develop the ERC GL2025

• The Executive Summary of the GL2025 will clearly state the process of the development of the GL2025, and include that the primary source of evidence for the ERC Guidelines was the ILCOR Consensus on Science with Treatment Recommendations (CoSTR 2024)



and 2025), or in case writing groups reviews were undertaken, or systematic review from another organisation were used. In case of no evidence or insufficient evidence to inform an evidence-based treatment recommendation, it will clearly state which aspects of the guideline are expert consensus and how that consensus was achieved.

- Cost impact, ease of implementation, and how to apply the recommendation in lower resource settings and remote areas should be considered when making recommendations.
- The sections in that Executive Summary will include: The composition of the Guideline Steering Committee and the GL Writing Groups, the decision-making process, COI handling, the scope of the GL, its methods and evidence reviews to come up with guideline recommendations, the stakeholder, "sister" organisations, and peer review consultation process, the availability of the ERC GL2025, possible updates, and finally the financial support (incl. sponsoring organizations if any).

4. The presentation of the GL chapters:

- a. title page
- b. summary
- c. summary algorithm(s) when appropriate
- d. when the guideline is an update, summary details of what has been updated
- e. list the authors and their affiliations
- f. the methodology and process (A brief summary of the overarching process will be published in the Executive Summary)
- g. a brief description of how stakeholders, the public and others were able to view and comment on the document (as this process is similar for all chapters, a more detailed description will be given in the Executive Summary)
- h. the objectives of the guidelines including scope and purpose, target audience and target population are described
- i. evidence statements
- j. recommendations
- k. links to supporting evidence (e.g. systematic reviews)
- I. references

5. Guidance on evidence review for the GL2025

- a. Information about the methodological approach to the systematic evidence evaluation process used by ILCOR is freely available in Resuscitation (2020 CoSTR publication) www.resuscitationjournal.com/article/S0300-9572(20)30459-7/fulltext
- b. The 'Grading of Recommendations Assessment, Development and Evaluation' (GRADE) system (www.gradeworkinggroup.org) has been used by ILCOR since 2015, which rates the certainty of evidence across outcomes in systematic reviews and can be used to grade the strength of recommendations in guidelines. In case writing groups are undertaking systematic reviews, they should use the GRADE process, and the



- systematic review should be published in a peer-reviewed journal, which enables citation of the publication in the ERC 2025 guidelines.
- c. The ILCOR systematic process included (i) systematically searching the literature for relevant evidence (ii) assessing the quality of that evidence (iii) managing conflict of interest (iv) systematic synthesis of consensus on science and treatment recommendations (v) posting for public comment (vi) undergoing independent, external peer review (https://gdt.gradepro.org/app/handbook/handbook.html).
- d. GRADE evaluation requires a specific research question in the PICO format: population, intervention, comparator(s) and outcomes. Criteria and reasons for inclusion or exclusion of evidence should be clearly stated.
- e. Details and dates of the search strategy including search terms, date of search, databases searched, and numbers of studies included and excluded, as well as a table describing included studies with bias assessment should be part of appendix to the publication.
- f. The strengths and limitations of the body of evidence, and acknowledgement of any areas of uncertainty, should be clearly stated.
- g. Reviews from other organisations need to be conducted and report recommendations according to AMSTAR (Assessing the methodological quality of systematic reviews, that include randomised or non-randomised studies of healthcare interventions, or both http://amstar.ca/index.php) and/or PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses www.prisma-statement.org).

6. Guideline Recommendations

- a. ERC Guidelines will present treatment recommendations, which includes the strength of the recommendation and the quality of the supporting evidence. These are classified in:
 - Strong recommendation (e.g. give, perform, should, recommended, is indicated)
 - Weak recommendation (e.g. suggest, consider, uncertain)
 - Unable to recommend for or against
- b. Quality of evidence, will be classified according to GRADE (https://gdt.gradepro.org/app/handbook/handbook.html#h.9rdbelsnu4iy)

b. Table 5.1: Quality of Evidence Grades			
Grade	Definition		
High	We are very confident that the true effect lies close to that of the estimate of the effect.		
Moderate	We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different		
Low	Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect.		
Very Low	We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect		



Quality of evidence is a continuum; any categorization involves some degree of arbitrariness.

- c. Expert consensus, where there is either no evidence, conflicting evidence or evidence from animal models, case series etc.) is always downgraded (weak recommendation).
- d. As most ERC guidelines will be used in emergencies where efficient, timely action is critical, they should be clear, concise, and easily to understand. They should be written in unambiguously plain English to allow understanding of non-medical individual, which also facilitates the implementation of the 2025 guidelines and updating training course curricula, manuals and other materials by ERC.
 - Each section shall highlight the key recommendations and in case new 2025 aspects.
 - Recommendations based on the certainty of evidence (to use the same wording as ILCOR), which shall demonstrate the analysis and discussion of health benefits, side effects and risks (e.g. to survival or quality of life).
 - Key priority recommendations will be emphasised, with targeted implementation, including the use of algorithms, and if feasible how to apply in lower resource settings or remote areas.
 - Recommendations that an intervention 'must' or 'must not' be used are solely included if there is a legal duty to apply this (e.g. adverse events that would be supported by statutory regulation).
- e. The ERC GL2025 are either new guidance or updated guidance. Both need to be stated clearly and updates need to clarify what is new. The previous versions should be referenced.
- f. The purpose of the guidelines is to provide evidence-based interventions that are most likely to be successful (e.g. increase the chances of successful resuscitation from cardiac arrest with full neurological recovery). Equality issues should be integral to the interpretation of evidence and integrated into the guidelines.
- g. The content and style of the ERC GL2025 shall be suitable for specified target audiences, aim to be practical, and user friendly. Detailed supporting evidence will usually be referenced, rather than included in the main text of any guidance.
- h. Members of the user groups should be involved in the public review process.

7. Peer review, stakeholder consultations, and public comments

- a. The final draft of any guidance will be subject to stakeholder consultation enabled by asking for public comments on the draft version in June 2025 over the period of 14 days. Communication to all stakeholders will be via the Newsletter, website, and direct contact of the members of the General Assembly (includes laypeople, clinicians).
- b. The Steering Committee and the writing group will review the comments. Changes to the guidance will be based on feedback using the same consensus process as for when making initial recommendations, and reasons for acting or not needs to be recorded.
- c. The final peer reviewed ERC GL2025 will be approved by the ERC Board and signed off by the ERC General Assembly.