GRADE Approach for Recommendations in the Global Guidelines for Falls Prevention and Management in Older Adults

The "Grades of Recommendation, Assessment, Development, and Evaluation" (GRADE) approach is a method for evaluating both the quality of evidence and the strength of recommendation based on clinical and practical experience.¹ For each recommendation, the GRADE approach allows for a graded appraisal that considers the quality of the evidence, the risks and benefits of implementing the recommendations, and the implications from a clinical and person-centered perspective.

GRADE asks whether your recommendation is strong (1) or weak (2) based on the quality of evidence being high (A), moderate (B), or low (C).

	Quality of Evidence				
		High (A)	Moderate (B)	Low (C)	
Strength of	Strong (1)	lA	1B	1C	
Recommendation	Weak/Conditional (2)	2A	2B	2C	

We also report our **certainty** when evaluating the quality of evidence using the following additional information:

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			

Certainty can be rated down for:	Certainty can be rated up for:	
Risk of biasImprecisionInconsistency	 Large magnitude of effect Dose-response gradient 	

Indirectness

Publication bias

• Confounding would reduce magnitude of effect

While it is true that strong recommendations often have high quality of evidence, it is not always the case. For example, a recommendation may have low evidence in support of it, but in your clinical and practical experience, it may be strongly recommended due to its low cost, feasibility, and practicality (1C). The opposite is also possible in which a recommendation has high quality of evidence, but due to its limits in cost, practicability, and availability, it is weakly recommended (2A). Recommendations may be considered conditional if they are only applicable in certain circumstances. For example, a conditional recommendation may be made to prescribe donepezil to prevent falls in individuals with Parkinson's Disease, since there is strong evidence that specific patients with cholinergic deficits and recurrent falls with Parkinson's Disease may benefit from Donepezil treatment.² For a complete list of possibilities, see the **Table on Page 3** with descriptions of recommendations from https://www.uptodate.com/home/grading-guide#FactorsStrongWeak

GRADE in the Global Guidelines Initiative

- **Preliminary Recommendations:** GRADE will be used to generate the 3-5 evidence-based recommendations made by each working group in the global guidelines for falls prevention and management initiative. The results from these reviews and recommendations will be discussed by the steering committee members who will draft the *preliminary recommendations* based on the findings from the Working Groups (summer 2021). These preliminary recommendations will be released to the patient panel, worldwide experts and stakeholders with the aim of obtaining feedback and developing a consensus using a modified version of the interactive Delphi technique.
- **Revised Recommendations:** By the spring of 2022, an ad-hoc writing committee will incorporate the revisions stemming from the Delphi process and create a revised recommendations document. These revised recommendations will be encrypted and posted in our website (www.worldfallsguidelines.com) enabling the Steering Committee, Working Groups leaders, and country leaders of our worldwide experts to access and participate in a web-based voting procedure in the spring 2022.
 - The online voting system saves automatically all your votes and justifications; therefore, you can stop, log out and resume your voting later on as necessary. The recommendations receiving between 80%-100% endorsement are deemed to have experts' consensus. Recommendations receiving less than 80% endorsement are NOT deemed to have consensus. Recommendations endorsed by experts, with or without justifications, will be tabled and discussed by the Steering Committee and Working Group Leaders during the executive meeting to decide which recommendations will enter the guidelines.

Grade of Recommendation	Clarity of risk/benefit	Quality of supporting evidence	Implications
1A. Strong recommendation, high quality evidence	Benefits clearly outweigh risk and burdens, or vice versa.	Consistent evidence from well performed randomized, controlled trials or overwhelming evidence of some other form. Further research is unlikely to change our confidence in the estimate of benefit and risk.	Strong recommendations, can apply to most patients in most circumstances without reservation. Clinicians should follow a strong recommendation unless a clear and compelling rationale for an alternative approach is present.
1B. Strong recommendation, moderate quality evidence	Benefits clearly outweigh risk and burdens, or vice versa.	Evidence from randomized, controlled trials with important limitations (inconsistent results, methodologic flaws, indirect or imprecise), or very strong evidence of some other research design. Further research (if performed) is likely to have an impact on our confidence in the estimate of benefit and risk and may change the estimate.	Strong recommendation and applies to most patients. Clinicians should follow a strong recommendation unless a clear and compelling rationale for an alternative approach is present.
1C. Strong recommendation, low quality evidence	Benefits appear to outweigh risk and burdens, or vice versa.	Evidence from observational studies, unsystematic clinical experience, or from randomized, controlled trials with serious flaws. Any estimate of effect is uncertain.	Strong recommendation, and applies to most patients. Some of the evidence base supporting the recommendation is, however, of low quality.
2A. Weak recommendation, high quality evidence	Benefits closely balanced with risks and burdens.	Consistent evidence from well performed randomized, controlled trials or overwhelming evidence of some other form. Further research is unlikely to change our confidence in the estimate of benefit and risk.	Weak recommendation, best action may differ depending on circumstances or patients or societal values.
2B. Weak recommendation, moderate quality evidence	Benefits closely balanced with risks and burdens, some uncertainly in the estimates of benefits, risks and burdens.	Evidence from randomized, controlled trials with important limitations (inconsistent results, methodologic flaws, indirect or imprecise), or very strong evidence of some other research design. Further research (if performed) is likely to have an impact on our confidence in the estimate of benefit and risk and may change the estimate.	Weak recommendation, alternative approaches likely to be better for some patients under some circumstances.
2C. Weak recommendation, low qualit evidence	Uncertainty in the estimates of benefits, risks, and burdens; benefits may be closely balanced with risks and burdens.	Evidence from observational studies, unsystematic clinical experience, or from randomized, controlled trials with serious flaws. Any estimate of effect is uncertain.	Very weak recommendation; other alternatives may be equally reasonable.

References List

- 1. Guyatt GH, Oxman AD, Schunemann HJ, Tugwell P, Knottnerus A. GRADE guidelines: a new series of articles in the Journal of Clinical Epidemiology. *J Clin Epidemiol*. 2011;64(4):380-382.
- 2. Alonso-Coello P, Schunemann HJ, Moberg J, et al. GRADE Evidence to Decision (EtD) frameworks: a systematic and transparent approach to making well informed healthcare choices. 1: Introduction. *BMJ*. 2016;353:i2016.