**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** |
| **Strength of Recommendation** |  | High (A) | Moderate (B) | Low (C) |
| Strong (1) | *1A* | *1B* | *1C* |
| Weak/Conditional (2) | *2A* | *2B* | *2C* |

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



**High**

**Moderate**

**Low**

We are very confident that the true effect lies close to that of the estimate of the effect

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

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:**

* Risk of bias
* Imprecision
* Inconsistency
* Indirectness
* Publication bias

**Certainty can be rated up for:**

* Large magnitude of effect
* Dose-response gradient
* 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.
* Recommendations receiving 75-100% agree or strongly agree are deemed to have consensus, thus they will be approved and will be a part of the final consensus falls guidelines.
* Recommendations receiving 50-74% agree or strongly agree are deemed to have partial support, thus they will be discussed until consensus among Steering Committee and Working Group leaders is reached or tabled if consensus is not achieved.
* Recommendations receiving 0-49% agree or strongly agree are deemed to have limited support and will not be approved.



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



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.