STRONG recommendations – should I change my practice?
Background

- Grading of Recommendations, Assessment, Development and Evaluation (GRADE) is a widely used rating system.
- Several COG-endorsed supportive care guidelines have used the GRADE approach.

**GRADE** classifies

Recommendations as **STRONG** or **WEAK**

and

Quality of the Evidence* as **VERY LOW**, **LOW**, **MODERATE** or **HIGH**

*Reflects the level of confidence that the estimate of an intervention’s effect is correct.
<table>
<thead>
<tr>
<th>Quality of the body of evidence</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High  ⊕⊕⊕⊕</strong></td>
<td>We are very confident that the true effect lies close to that of the estimate of the effect</td>
</tr>
<tr>
<td><strong>Moderate  ⊕⊕⊕</strong></td>
<td>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</td>
</tr>
<tr>
<td><strong>Low  ⊕⊕</strong></td>
<td>Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect</td>
</tr>
<tr>
<td><strong>Very Low  ⊕</strong></td>
<td>We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect</td>
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<table>
<thead>
<tr>
<th>Strength of Recommendation</th>
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<tr>
<td><strong>Strong</strong></td>
<td>Most people would want and should receive the recommended course of action. The recommendation can be adapted as a policy in most situations.</td>
</tr>
<tr>
<td><strong>Weak</strong></td>
<td>There is a need for substantial debate and involvement of stakeholders in policy making. The majority of people would want the recommended course of action, but many would not. Clinicians should be more prepared to help patients to make a decision that is consistent with their own values.</td>
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**website:** [http://www.gradeworkinggroup.org/](http://www.gradeworkinggroup.org/)
In this module we explain what a **STRONG GRADE GUIDELINE RECOMMENDATION** is and how to integrate such recommendations into your practice.
GRADE recommendations: A balance of factors

Possible factors:
- Benefits and Harms
- Quality of the Evidence
- Values
- Acceptability
- Feasibility
- Equity
- Costs
Because GRADE incorporates separate judgments of evidence quality and strength of recommendation…

High quality evidence does not necessarily lead to a strong recommendation

and

Low quality evidence does not always lead to a weak recommendation
If after weighing all factors, the guideline panel is **very certain** that desirable effects outweigh undesirable effects, they will make a strong recommendation.
GRADE example: Should adults in long-term care take Vitamin D to decrease the risk of hip fractures?

Weighing the factors:

More factors favor recommending taking vitamin D.
- *Moderate quality evidence i.e. moderately confident that vitamin D decreases hip fractures in this population
- @Low cost intervention, which is acceptable to patients
- #Low risk of harm.

For
- Vitamin D is inexpensive and easy to take®
- Low risk of harm®
- Moderately confident vitamin D decreases the risk of hip fractures*

Against
- Small additional resources to provide Vitamin D in long-term care setting
The guideline panel therefore made a **STRONG recommendation** for adults in long-term care to take vitamin D to decrease risk of hip fractures.

- **For**
  - Moderately confident vitamin D decreases the risk of hip fractures
  - Vitamin D is inexpensive and easy to take
  - Low risk of harm

- **Against**
  - Small additional resources to provide vitamin D in long-term care setting

This means: Almost all adults in this setting would want to take vitamin D supplements and clinicians should prescribe it.
## Implications for practice

<table>
<thead>
<tr>
<th>Implications</th>
<th>Strong recommendation</th>
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<tbody>
<tr>
<td>For patients</td>
<td>Most individuals in this situation would want the recommended course of action, and only a small proportion would not. Formal decision aids are not likely to be needed to help individuals make decisions consistent with their values and preferences.</td>
</tr>
<tr>
<td>For clinicians</td>
<td>Most individuals should receive the intervention. Adherence to this recommendation according to the guideline could be used as a quality criterion or performance indicator.</td>
</tr>
<tr>
<td>For policy makers</td>
<td>The recommendation can be adopted as policy in most situations.</td>
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</tbody>
</table>

Source: [http://www.gradeworkinggroup.org/](http://www.gradeworkinggroup.org/)
Want to learn more about GRADE?
Visit: https://cebgrade.mcmaster.ca/training/

Acknowledgement:
Example courtesy of Dr. Nancy Santesso, GRADE group