## GRADE:

## Grading of Recommendation, Assessment, Development and Evaluation

## https://cebgrade.mcmaster.ca/aboutgrade.html

| Grade of<br>Recommendation  | Clarity of<br>risk/benefit  | Quality of supporting<br>evidence  | Implications   |
|---|---|--|--|
| <b>1A.</b><br>Strong<br>recommendation,<br>high quality<br>evidence     | Benefits clearly<br>outweigh risk and<br>burdens, or vice<br>versa.   | Consistent evidence from well<br>performed randomized,<br>controlled trials or<br>overwhelming evidence of some<br>other form. Further research is<br>unlikely to change our<br>confidence in the estimate of<br>benefit and risk.   | Strong recommendations, can<br>apply to most patients in<br>most circumstances without<br>reservation. Clinicians should<br>follow a strong<br>recommendation unless a<br>clear and compelling rationale<br>for an alternative approach is<br>present. |
| <b>1B.</b><br>Strong<br>recommendation,<br>moderate quality<br>evidence | Benefits clearly<br>outweigh risk and<br>burdens, or vice<br>versa.   | Evidence from randomized,<br>controlled trials with important<br>limitations (inconsistent results,<br>methodologic flaws, indirect or<br>imprecise), or very strong<br>evidence of some other<br>research design. Further<br>research (if performed) is likely<br>to have an impact on our<br>confidence in the estimate of<br>benefit and risk and may<br>change the estimate. | Strong recommendation and<br>applies to most patients.<br>Clinicians should follow a<br>strong recommendation<br>unless a clear and compelling<br>rationale for an alternative<br>approach is present.   |
| <b>1C.</b><br>Strong<br>recommendation,<br>low quality evidence         | Benefits appear to<br>outweigh risk and<br>burdens, or vice<br>versa. | Evidence from observational<br>studies, unsystematic clinical<br>experience, or from<br>randomized, controlled trials<br>with serious flaws. Any estimate<br>of effect is uncertain.   | Strong recommendation, and<br>applies to most patients.<br>Some of the evidence base<br>supporting the<br>recommendation is, however,<br>of low quality.   |

| <b>2A.</b><br>Weak<br>recommendation,<br>high quality<br>evidence      | Benefits closely<br>balanced with<br>risks and burdens.   | Consistent evidence from well<br>performed randomized,<br>controlled trials or<br>overwhelming evidence of some<br>other form. Further research is<br>unlikely to change our<br>confidence in the estimate of<br>benefit and risk.   | Weak recommendation, best<br>action may differ depending<br>on circumstances or patients<br>or societal values.      |
|--|---|--|--|
| <b>2B</b> .<br>Weak<br>recommendation,<br>moderate quality<br>evidence | Benefits closely<br>balanced with<br>risks and burdens,<br>some uncertainly<br>in the estimates of<br>benefits, risks and<br>burdens.       | Evidence from randomized,<br>controlled trials with important<br>limitations (inconsistent results,<br>methodologic flaws, indirect or<br>imprecise), or very strong<br>evidence of some other<br>research design. Further<br>research (if performed) is likely<br>to have an impact on our<br>confidence in the estimate of<br>benefit and risk and may<br>change the estimate. | Weak recommendation,<br>alternative approaches likely<br>to be better for some patients<br>under some circumstances. |
| <b>2C.</b><br>Weak<br>recommendation,<br>low quality evidence          | Uncertainty in the<br>estimates of<br>benefits, risks,<br>and burdens;<br>benefits may be<br>closely balanced<br>with risks and<br>burdens. | Evidence from observational<br>studies, unsystematic clinical<br>experience, or from<br>randomized, controlled trials<br>with serious flaws. Any estimate<br>of effect is uncertain.   | Very weak recommendation;<br>other alternatives may be<br>equally reasonable.  |

\*Numbers represent strength of recommendation (strong, weak) and letters represent quality (low, moderate, high)



# **GRADE** Grades of Recommendation, Assessment, Development, and Evaluation

| Target Audience   | Strong Recommendation   | Weak Recommendation   |
|---|---|---|
| For patients/public   | We believe most people in<br>this situation would want<br>the recommended course<br>of action and only a small<br>number would not.   | We believe that most people in this<br>situation would want the recommended<br>course of action, but many would not.<br>Different choices are acceptable for<br>each person, and clinicians should sup-<br>port patients and discuss their values<br>and preferences to reach a decision.<br>Decision aids may support people in<br>reaching these decisions. |
| For clinicians  | The recommendation would<br>apply to most individuals.<br>Formal discussion aids are<br>not likely to be needed to<br>help individuals make deci-<br>sions consistent with their<br>values and preferences. | We recognize that different choices may<br>be appropriate for individual patients.<br>Clinicians should support each patient<br>in reaching a management decision<br>consistent with his or her values and<br>preferences. Decision aids may support<br>individuals in reaching such decisions.   |
| For policy makers<br>and developers of<br>quality measures The recommendation can<br>be adapted as policy in most<br>situations. Adherence to this<br>recommendation according<br>to the guideline could be<br>used as a quality criterion or<br>performance indicator. |   | Policy-making will require substantial de-<br>bate and involvement of various stake-<br>holders. An appropriately documented<br>decision making process could be used<br>as quality indicator.  |

### QUALITY OF EVIDENCE

Recommendations in the guidelines prepared by the Canadian Task Force on Preventive Health Care (CTFPHC) www.canadiantaskforce.cs are graded as either strong or weak according to the Grading of Recommendations Asessament, Development and Evaluation system (GRADE). The CTFPHC's judgments about the **quality of evidence** are summarized by the degree of confidence that available evidence correctly reflects the theoretical true effect of the intervention or service.

We judge evidence as **high quality** when we are highly confident that the true effect lies close to that of the estimate of the effect. For example, evidence is judged as high quality if all of the following apply: there is a wide range of studies included in the analyses with no major limitations, there is little variation between studies, and the summary estimate has a narrow confidence interval.

#### We judge evidence as moderate quality when we

consider that the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different. For example, evidence might be judged as moderate quality if any of the following applies: there are only a few studies and some have limitations but not major flaws, there is some variation between studies, or the confidence interval of the summary estimate is wide.

### We judge evidence to be low or very low quality when

the true effect may be substantially different from the estimate of the effect. For example, evidence might be judged as low quality if any of the following applies: the studies have major flaws, there is important variation between studies, or the confidence interval of the summary estimate is very wide.

#### STRENGTH OF RECOMMENDATIONS

In addition to the quality of supporting evidence, the strength of our recommendations is influenced by,

- the balance between desirable and undesirable effects;
- the variability or uncertainty in values and preferences of citizens; and
- whether or not the intervention represents a wise use of resources.

Strong recommendations are those for which <u>we</u> are confident that the desirable effects of an intervention outweigh its undesirable effects (atrong recommendation for an intervention) <u>or</u> that the undesirable effects of an intervention outweigh its desirable effects (atrong recommendation against an intervention). A strong recommendation implies that most individuals will be best served by the recommended course of action.

Weak recommendations are those for which the

desirable effects probably outweigh the undesirable effects (weak recommendation for an intervention) or undesirable effects probably outweigh the desirable effects (weak recommendation against an intervention) but uncertainty exists. Weak recommendations result when the balance between desirable and undesirable effects is amail, the quality of evidence is lower, and there is more variability in the values and preferences of individuals. A weak recommendation implies that we believe most people would want the recommended course of action but that many would not. Cliniciana must recognize that different choices will be appropriate for different individuple, and they must support each person in reaching a management decision consistent with his/her values and preferences. Policy-making will require substantial debate and involvement of various stakeholders.

SOURCE: Grades of Recommendation, Assessment, Development, and Evaluation (GRADE) Working Group, 2011.