

## Appendix 3 (as supplied by the authors): GRADE Basis of Recommendation Decision Table for Cervical Cancer Screening

<b>Question:</b> What is the effect of cervical cancer screening on incidence of and mortality from invasive cervical cancer or all-cause mortality?		
<b>Population:</b> Asymptomatic women who are or have been sexually active		
<b>Intervention:</b> Cervical cytology (conventional or liquid-based, manual or computer assisted)		
<b>Setting (if relevant):</b> Primary Care Practice		
Decision domain	Summary of reason for decision	Subdomains influencing decision
<b>Quality of evidence (QoE)</b> <i>Is there high or moderate quality of evidence</i>  Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	QoE for benefits of screening: High Varies depending on age QoE for harms of screening: Very Low	Key reasons for downgrading or upgrading: QoE for benefits: Directness downgraded for one RCT due to concerns regarding population characteristics and intervention characteristics. Evidence from 12 case control studies downgraded because of concerns regarding directness, and strongly suspected publication bias.
<b>Balance of benefits and harms</b> <i>Is there certainty that the benefits outweigh the harms?</i>  Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  In some age groups	There is important clinical benefit with an estimated low rate of serious harms in women aged 30-69. The evidence for clinical benefit in women <30 and ≥70 is less clear. The burden of potential harms is more heavily weighted in the younger age groups	Is the baseline risk for benefit similar across subgroups? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Greatest benefit of screening seen in 30-64 year age group Should there be separate recommendations for subgroups based on risk levels? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>  Is the baseline risk for harm similar across subgroups? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> The potential impact of false positives and over diagnosis leading to unnecessary treatment varies with age. Should there be separate recommendations for subgroups based on harms? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>Values and preferences</b> <i>Is there confidence in the estimate of relative importance of outcomes and</i>	Data suggests that patients may prefer shorter screening intervals. Some evidence that patient feel more comfortable with female health care providers. Barriers to screening include cultural beliefs, fear of pain, and lack of	Perspective taken: patient  Source of values and preferences: Survey data, systematic reviews  Source of variability, if any: Information on

<p><i>patient preferences?</i></p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> Probably</p>	<p>information regarding susceptibility to cancer.</p>	<p>preferences for screening intervals may be affected by screening policies of countries in which the surveys were conducted</p> <p>Method for determining values satisfactory for this recommendation? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Would have been helpful to have information on preferences for age at screening, and more detailed information regarding how benefits and harms are balanced</p> <p>All critical outcomes measured? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p><b>Resource implications</b> <i>Are the resources worth the expected net benefit?</i></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Modeling studies suggest differences in cost-effectiveness depending on screening approach; however both cytology and HPV testing appear to be cost-effective versus no screening in Canadian setting.</p>	<p>Feasibility: Is this intervention generally available? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Is there lots of variability in resource requirements across settings? Access to cytology testing is readily available across the country, while there may be some differences in access to HPV testing</p>
<p><b>Overall strength of recommendation:</b></p>	<p>Strong: We recommend that women &lt;20 years of age do not undergo routine screening Weak: We recommend that women 20-24 years of age do not undergo routine screening Weak: We recommends routine screening every 3 years (cytology) for women aged 25-29 years Strong: We recommend routine screening every 3 years (cytology) for women aged 30-69 years Weak: We recommend that routine screening may cease for women aged 70+ if adequate screening has been performed before this age, otherwise, recommendation is to screen until 3 successive negative cytology smears have been obtained.</p>	
<p><b>Remarks and values and preference statement</b></p>	<p>The recommendations place a high value on the importance of demonstrating clear benefits (decreased mortality or decreased morbidity), as well as on the available evidence for potential harms of screening, and the age-specific rates of cervical cancer in the Canadian population. More research is needed on the benefits and harms of HPV testing.</p>	