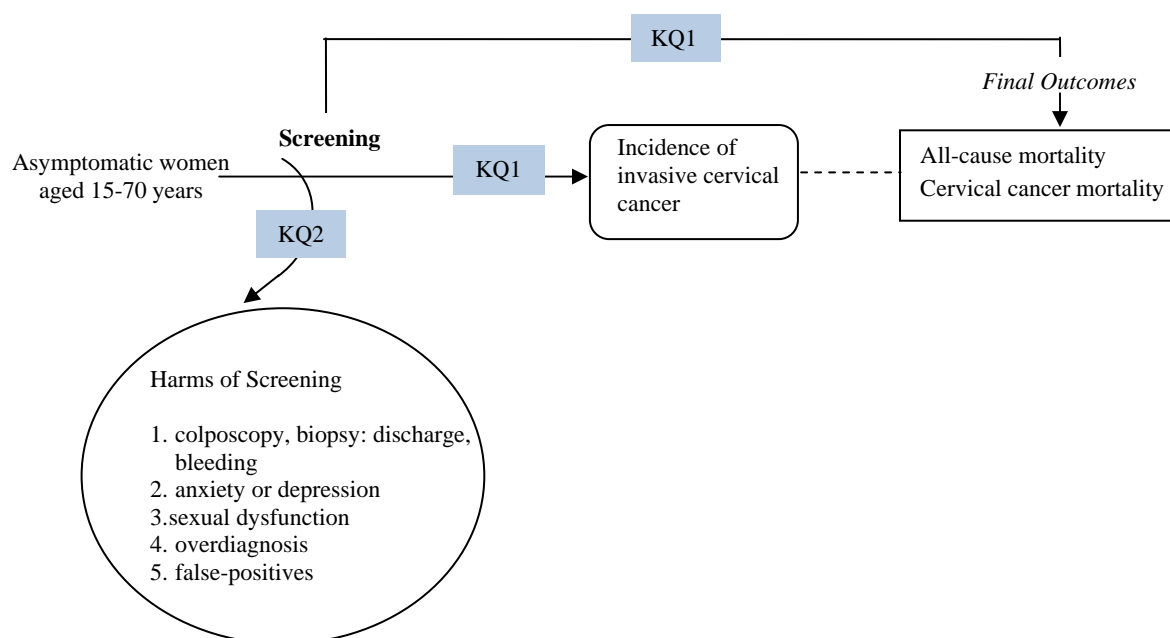


Appendix 1 (as supplied by the authors): Analytic Framework and Key Questions



Key questions considered for this review include:

- KQ1. What is the effect of cervical cancer screening on incidence of and mortality from invasive cervical cancer or all-cause mortality?
- KQ1a. Do liquid-based methods of cytology reduce incidence of or mortality from invasive cervical cancer compared to slide-based techniques?
 - KQ1b. Does either primary or reflex HPV testing reduce incidence of or mortality from invasive cervical cancer compared to conventional cytologic screening?
 - KQ1c. Does computer-assisted screening reduce incidence of or mortality from invasive cervical cancer compared to conventional cytologic screening?
 - KQ1d. How does varying the screening interval affect incidence of or mortality from invasive cervical cancer?
 - KQ1e. How does varying the age at which screening is started or stopped reduce incidence of or mortality from invasive cervical cancer?

KQ2. What are the harms of cervical cancer screening? (Including: colposcopy and biopsy procedures; anxiety/depression; sexual dysfunction; overdiagnosis; and false-positives).

KQ2a. At what rates do these harms occur, by age, and with different screening intervals?

Additional contextual questions are:

CQ1. What are the harms of cervical cancer screening for pre-cancer (i.e., false-positive/specificity and overdiagnosis rates)?

CQ2. What are the harms of treatment of cervical cancer? Harms include: (a) harms of colposcopy, (b) harms of cone biopsy (immediate and late effects): pre-term labour, miscarriage, (c) harms of LEEP (immediate and late effects): pre-term labour, miscarriage, (d) harms of total hysterectomy: incontinence, infection, hospitalization, (e) harms of radiotherapy.

CQ3. What is the effect of cervical cancer screening in subgroups: reduction in mortality and/or morbidity, and harms? Subgroups include: (a) Aboriginal populations, (b) rural populations, (c) immigrants, (d) pregnant women, (e) women who have sex with women, (f) immunocompromised women (e.g., with HIV), (g) women who had a hysterectomy, (h) women who received the HPV vaccination, and (i) women who have multiple partners or a change in partners (they may be at a higher risk of HPV infection and progression). Is there evidence that women from any of these groups have a higher risk of invasive cervical cancer, or greater risk of harms (of screening), and if so, is there evidence that screening policies should be different for any of these groups: more or less frequent or with different starting/stopping rules?

CQ4. What are the resource implications and cost effectiveness of cervical cancer screening in Canada?

CQ5. What are patients' values and preferences regarding cervical cancer screening?

CQ6. What process and outcome performance measures or indicators have been identified in the literature to measure and monitor the impact of cervical screening?

CQ7. What is the evidence of the value of organized programs for cervical cancer screening?

CQ8. What is the evidence of using different categories of health care professionals to perform Pap smears in medical or different settings?

CQ9. What is the evidence of the value (acceptability, participation rates) of women self-sampling for HPV testing?