

OP76 Cost-Effectiveness Of Offering Human Papillomavirus Self-Sampling To Non-Attendees Of Organized Primary Cervical Cancer Screening In Germany

Gaby Sroczynski (gaby.sroczynski@umit-tirol.at),
Lára R. Hallsson, Milena Muehler, Peter Hillemanns,
Matthias Jentschke and Uwe Siebert

Introduction: In Germany, organized cervical cancer screening with annual Papanicolaou (Pap) cytology for women age 20 to 34 years and three-yearly co-testing with human papillomavirus (HPV) and Pap for women as of age 35 years is standard. However, about 30 percent of women eligible for screening remain un/under-screened. We systematically evaluated benefits, risks, and cost-effectiveness of offering additional HPV self-sampling (HPV-SS) to non-attendees.

Methods: A validated Markov model for the German context was used to evaluate different HPV-SS screening strategies compared to standard clinician-based screening: HPV-SS for non-attendees age 25 to 65, 30 to 65 or 35 to 65 years, every five years with regular invitation, either opt-in (invitation with link to order the test), or send-to-all (test sent with invitation). German clinical, epidemiological, and economic data (index year 2022/23), along with test accuracy and HPV-SS-attendance data from international meta-analyses and trials were incorporated. Outcomes included undiscounted life years gained (LYG) compared to standard screening without HPV-SS in non-attendees, and the incremental cost-effectiveness ratio (ICER; in EUR/LYG). Comprehensive sensitivity analyses were performed.

Results: Incremental undiscounted effectiveness (compared to standard screening without HPV-SS) and discounted ICERs (compared to next effective) for non-dominated HPV-SS screening strategies were 0.00090 LYG (EUR22,700/LYG) for offering with five-yearly screening invitation an HPV-SS (opt-in) to non-attendees age 35 to 65, 0.00166 LYG (EUR25,900/LYG) for HPV-SS (send-to-all) age 35 to 65, 0.00167 (EUR726,000/LYG) for HPV-SS (send-to-all) age 30 to 65, and 0.00167 LYG (EUR1.78 million/LYG) for HPV-SS (send-to-all) age 25 to 65 years. Other opt-in strategies were dominated. Results were robust over a wide range of parameter variations.

Conclusions: Offering HPV-SS (send-to-all) to non-attendees every five years as an additional strategy within the organized cervical cancer screening program is effective and cost effective in the German context. The results can be used to inform decision-makers and

clinical guideline developers regarding incorporation of the specific version of HPV self-sampling into the established organized cervical cancer screening program in Germany.

OP79 Innovations In Measuring And Valuing Outcomes: Generating Preferences For The EQ Health And Wellbeing Short

Clara Mukuria (c.mukuria@sheffield.ac.uk)

Introduction: The value of health technologies may not be fully reflected in existing generic preference-based measures (GPBMs). The nine-dimension EQ Health and Wellbeing Short (EQ-HWB-S) is a new GPBM developed to assess health, informal carer, and social-care-related quality of life. The objective was to compare standard and new approaches used to generate preferences for the EQ-HWB-S.

Methods: Three feasibility studies that included qualitative work have valued the EQ-HWB-S with members of the public in the United Kingdom: (i) videoconferencing interviews using time trade-off (TTO) and discrete choice experiments (DCEs) from the EuroQol Valuation Technology (EQ-VT) protocol (n=600); (ii) online DCEs using the Potentially All Pairwise Rankings of all possible Alternatives (PAPRIKA) method (n=300), an adaptive DCE with a binary search to locate "dead"; and (iii) Online elicitation of Personal Utility Functions (OPUF) (n=300), which is a compositional method with dimension weighting, response level rating and anchoring on dead. Participant/interviewer feedback, data quality, and the weights were compared.

Results: Self/interviewer reported understanding was high (>70%) across all studies. Qualitative findings indicated misunderstanding for some OPUF steps (e.g., the anchoring on dead). Inconsistencies or illogical answers were small in the EQ-VT study (7%) and OPUF (16%). The PAPRIKA study had a priori exclusions criteria (e.g., time taken) that resulted in 44 percent exclusions. Pain, activity, mobility, and sadness/depression were the most important in all the studies. The value of the worst state was -0.384, -0.51, and -0.15 for EQ-PVT, PAPRIKA, and OPUF, respectively, and there were differences in dimension weights (e.g., PAPRIKA gave less weight to mobility but more to cognition).

Conclusions: EQ-HWB-S is a GPBM that provides an innovative approach to measuring and valuing outcomes. Standard and new approaches to eliciting preferences are feasible, but there are differences in the resultant weights. PAPRIKA and OPUF may improve attribute attendance and be more cost effective as they are administered online, but there is scope for improvement to ensure understanding and engagement.