

Evaluating the *Tradeoffs* of HPV Self-Collect for Cervical Cancer Screening



A self-collect vaginal swab is collected by the patient in a health care or private setting; and **should only be considered when the patient and healthcare provider (HCP) determine that it is not possible for the clinician to collect a cervical specimen.**^{1,3}



HPV self-collect is **for individuals currently not participating or engaging in routine screening.** The lack of an organized screening program in the **US makes it difficult to identify under-screened or never-screened individuals.**



Screening alone does not prevent cancer; positive HPV test results must be managed and treated. This requires communication with patients and ensuring all follow-up visits are conducted.⁴

“...the primary risk associated with self-collected vaginal specimens may arise if regularly-screened individuals electively switch from clinician-collected cervical specimens to self-collected vaginal specimens, which could result in potential missed cervical disease cases that could have otherwise been detected and prevented using the current standard of care (i.e., clinical-collected cervical specimens).”

– FDA^{2,3}

Clinician-Collected Cervical Specimens are Preferred – ASCCP⁴

Patient and Provider Tradeoffs of HPV Self-Collection

Loss to Follow-Up: Notable concern with nearly 4-fold higher loss to follow-up compared to clinician-collection, as seen in the Dutch national program.⁴

Triage Testing: Cannot be performed on a vaginal specimen. A speculum exam for clinician collection of a cervical specimen for triage testing is recommended.⁴

Repeat Testing: Recommended every 3 years following HPV-negative results using self-collected vaginal specimens due to lack of longitudinal safety and effectiveness data.⁴

Cytology is needed in the following scenarios⁴:

- HPV 16/18 positive: requires immediate diagnostic evaluation (e.g. colposcopy) and ongoing surveillance.*
- HPV-positive, genotyping unknown.
- HPV HR12 (other) positive.
- HPV 45, 33/58, 31, 52, 35/39/68, 51 positive.

“...self-collect vaginal specimens appear less sensitive and specific in comparison to clinician-collected cervical specimens.”

– FDA regarding HPV self-collect^{2,3}

“Clinician-collected cervical specimens have been the standard of care in the United States for cervical cancer screening for over half a century, and over 80% of women report participating in regular screening clinician-collected cervical samples have the advantage that cervical cells are obtained...”

– ASCCP⁴

Screening with HPV-Alone[†] Misses Cervical Cancer

1 in 5

cervical cancers were missed with HPV-Alone^{†5,6}

Screening with Pap + HPV Together (Co-testing) identified

70%

of the cancers missed by HPV-Alone^{†7}

95%

of cervical cancers were detected with Pap + HPV Together (Co-testing)^{5,6}

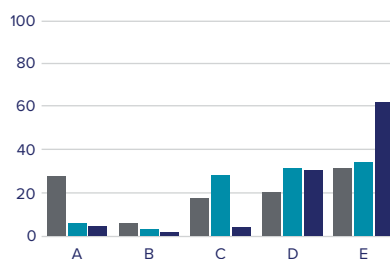
Provider Beliefs of Screening Modality Effectiveness⁸

“Fewer providers believed in the effectiveness of pHPV [Primary HPV] to reduce cervical cancer mortality and were less likely to recommend pHPV [Primary HPV] in the correct age group and screening interval compared with cytology-based screening modalities.”

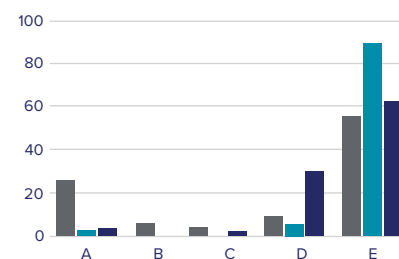
– Kruse, 2023⁸

”

21-29 Years Old



30-65 Years Old



A – I'm not sure B – Effectiveness unknown C – Not very effective D – Somewhat effective E – Very effective
● pHPV ● Co-testing ● Cytology Alone

Patient Preferences for HPV Self-Collect⁹



All women regardless of screening modality prefer to start screening at the age of 21.



Co-testing was the preferred screening method among adequately and under-screened women.



HPV self-collect was the least preferred method of screening among adequately screened women.



Under-screened women prefer co-testing over HPV self-collect.



Increasing cervical cancer screening by an HCP and educating women about improvements in accuracy is critical to help women avoid this preventable cancer.

* As described in the 2019 ASCCP guidelines, collection of cervical cytology at the colposcopy visit is recommended because additional diagnostic testing and surveillance are required.

† A positive HPV screening result may lead to further evaluation with cytology and/or colposcopy.

References: 1. Food and Drug Administration (FDA). SSED: Human Papillomavirus (HPV) DNA Detection kit for BD Onclarity HPV Assay. Template. Premarket Approval Application P160037/ S017. Published May 2024. 2. Food and Drug Administration (FDA). SSED: Human Papillomavirus (HPV) DNA Detection kit for cobas HPV (4800). Template. Premarket Approval Application P100020/S055. Published May 2024. 3. Food and Drug Administration (FDA). SSED: Human Papillomavirus (HPV) DNA Detection kit for cobas HPV (5800/6800/8800). Template. Premarket Approval Application P190028/S009. Published May 2024. 4. Wentzensen N, Massad LS, Clarke MA, Garcia F, Smith R, Murphy J, Guido R, Reyes A, Phillips S, Berman N, Quinlan J, Lind E, Perkins RB; Enduring Consensus Cervical Cancer Screening and Management Guidelines Committee. Self-Collected Vaginal Specimens for HPV Testing: Recommendations From the Enduring Consensus Cervical Cancer Screening and Management Guidelines Committee. *J Low Genit Tract Dis.* 2025 Apr 1;29(2):144-152. doi: 10.1097/LGT.0000000000000885. Epub 2025 Feb 21. PMID: 39982254; PMCID: PMC11939108. 5. Blatt AJ, et al. Comparison of cervical cancer screening results among 256,648 women in multiple clinical practices. *Cancer Cytopathol.* 2015;123(5):282-288. doi:10.1002/cncy.21544. (Study included ThinPrep®, SurePath and Hybrid Capture 2 High-Risk HPV DNA test). 6. Austin et al. Enhanced Detection of Cervical Cancer and Precancer Through Use of Imaged Liquid-Based Cytology in Routine Cytology and HPV Cotesting. *Am J Clin Pathol* 2018; 150:385-392. 7. Kaufman H, et al. Contributions of Liquid-Based (Papancicolaou) Cytology and Human Papillomavirus Testing in Cotesting for Detection of Cervical Cancer and Precancer in the United States. *Am J Clin Pathol.* 2020;XX:0-0 DOI: 10.1093/AJCP/AQAA074 (Study included ThinPrep Pap test, ThinPrep imaging, SurePath Pap test, SurePath imaging, Aptima HPV and Hybrid Capture 2). 8. Kruse G, et al. Provider beliefs in effectiveness and recommendations for primary HPV testing in 3 health-care systems. *JNCI Cancer Spectrum.* 2023;7(1). 9. Zhu P, Tatar O, Haward B, Griffin-Mathieu G, Perez S, Smith L, Brotherton J, Ogilvie G, Rosberger Z. Assessing Canadian women's preferences for cervical cancer screening: A brief report. *Front Public Health.* 2022 Jul 28;10:962039. doi: 10.3389/fpubh.2022.962039. PMID: 35968487; PMCID: PMC9366717.