

# Concordance of hrHPV testing among clinician-collected and patient-collected samples: A Systematic Review

Sarah Beaverson, Alison Huffstetler M.D.

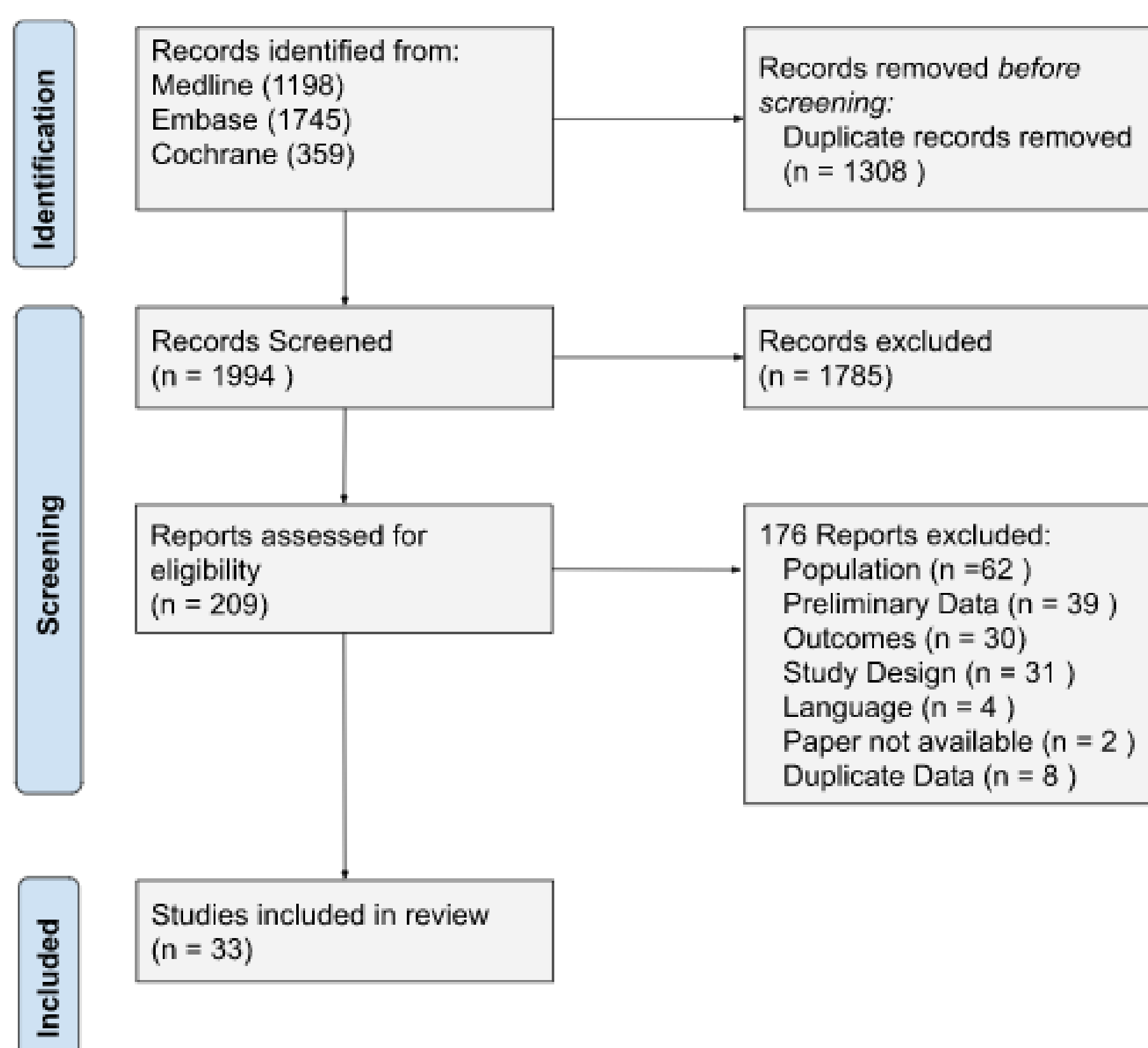


## Introduction

- In 2018, the USPSTF updated recommendations for cervical cancer screening to include high-risk HPV (hrHPV) testing, alone or with cytology, every 5 years in women 30-65 years old<sup>1</sup>
- Samples for hrHPV testing can be collected by the patient through self-swab kits, a method called “self-sampling”
- Patient-collection may be one strategy to increase screening rates in under-screened populations<sup>2</sup>
- The goal of this study was to perform a comprehensive systematic review examining the concordance of hrHPV testing between clinician-collected and patient-collected samples

## Methods

### Systematic Review PRISMA diagram



## Results

### Study Settings

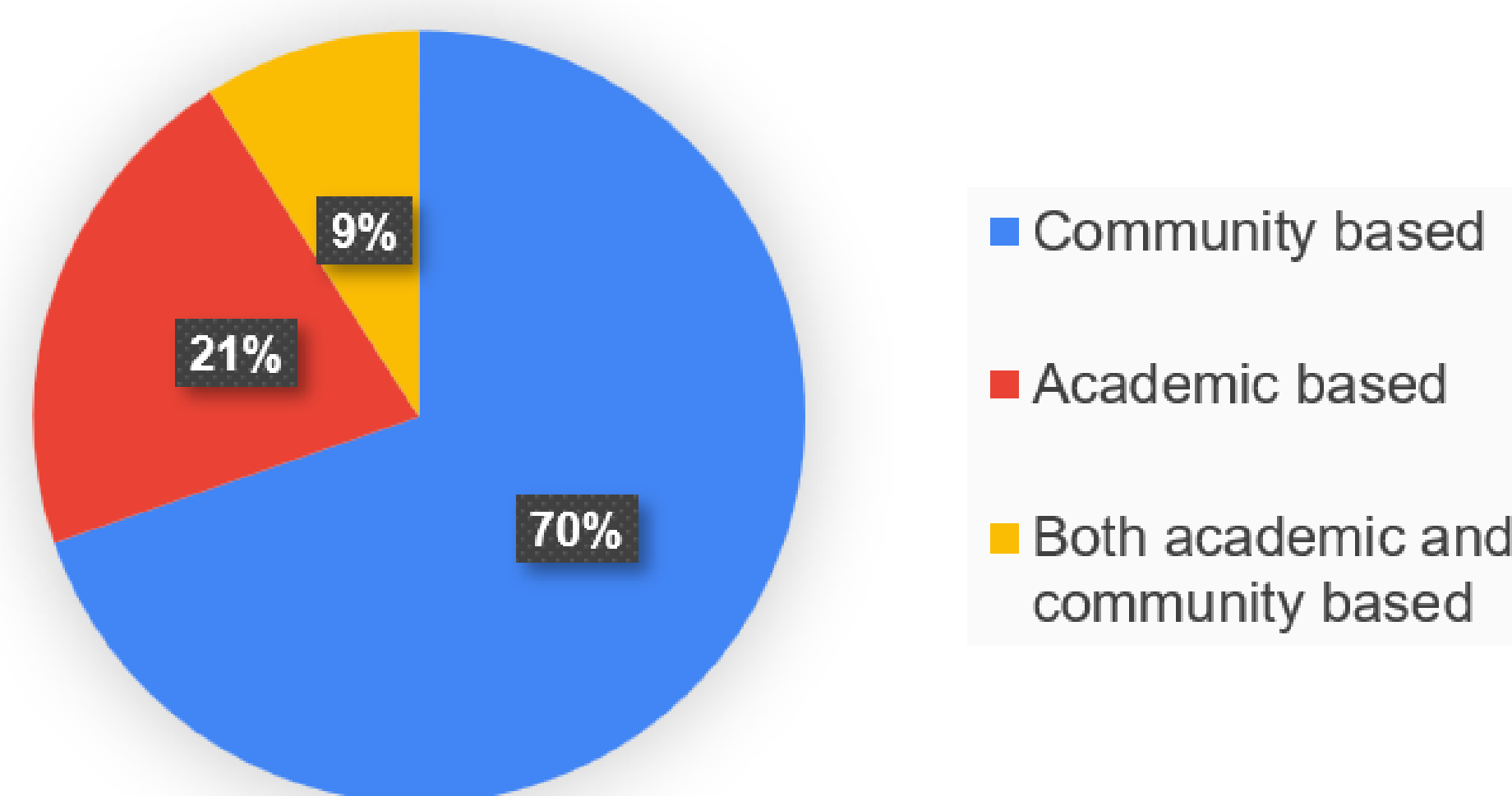


Table 1 – Range of HPV Detection Rates

	Range of positive detection rates (%)	N
<b>Self-collected HPV testing</b>	4.7 - 63.0	33
<b>Clinician-collected testing</b>	3.7 - 62.0	33

Table 2 – Concordance and Kappa between Self-collected and Clinician-Collected Samples

	Average	Range	N
<b>Concordance</b>	89.29%	76.4% – 96.2%	33
<b>Kappa</b>	0.65	0.37 – 0.77	33

## Conclusion / Implications

- The average concordance and kappa values suggest strong, substantial agreement between self-collected and clinician-collected samples
- Self-sampling primary HPV testing is an accurate, reliable method to identify HPV positivity
- We hope our results will help inform HPV screening guidelines on incorporating self-testing in the future.
- Further research is needed to identify practical implications of offering self-sampling and evidence-based strategies to implement into clinical practice

## Sources

1. US Preventive Services Task Force, Curry, S. J., Krist, A. H., Owens, D. K., et al. (2018). Screening for Cervical Cancer: US Preventive Services Task Force Recommendation Statement. *JAMA*, 320(7), 674–686. <https://doi-org.proxy.library.vcu.edu/10.1001/jama.2018.10897>
2. Huffstetler A. N. (2020). The Positive Impact of Primary hrHPV Self-Testing. *Journal of women's health (2002)*, 29(7), 894–895. <https://doi-org.proxy.library.vcu.edu/10.1089/jwh.2020.8432>

## Acknowledgements

Dr. Alison Huffstetler  
Virginia ACORN  
VCU Department of Family Medicine