

# WHO Cervical Cancer Elimination and removing barriers to screening engagement: A primary HPV screening laboratory experience of testing self-collected samples.

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# Background

Few diseases reflect global inequities as much as cervical cancer. Worldwide, it is the 4th most common cancer among women. It is vaccine preventable and curable if detected early.

In England, approximately 3 in 10 eligible people do not engage with cervical screening. Self- sampling may have the potential to help this cohort attend screening. It may also help reach the 2030 global WHO targets for cervical cancer elimination.

Our aim is to share a primary HPV screening laboratory experience of testing self-collected samples for HPV based cervical screening.

# Methods

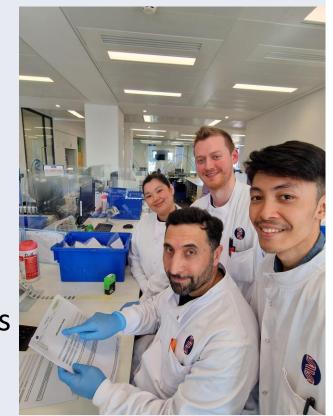
Between 2020 and 2023, Cervical Screening London (CSL) supported research into self-sampling, with its participation in both the You Screen (1) and HPValidate (2) studies. Since 2024 it is supporting the implementation of NHS England London self-sampling for under-screened women.

We performed a review of the implementation of laboratory testing of self-collected samples, using the People, Process, Technology framework. In excess of 9,000 self-collected samples processed by the laboratory between 2021 and 2022 were considered in the review.

# Results

## People

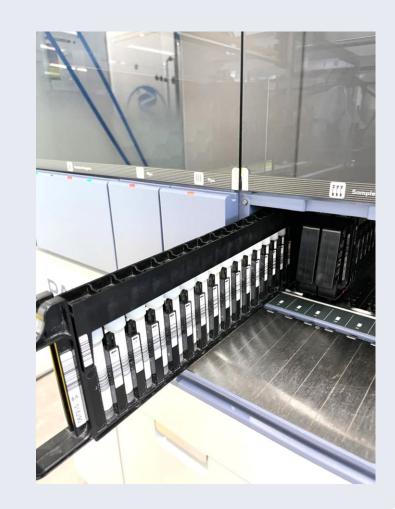
- Staff training in primary care and laboratory
- Dry self-collected samples immediately suspended in Preservcyte in the GP practice to reduce invalid rate and optimise automation in laboratories
- Partnership working across organisations to agree protocols



## Results

#### **Process**

- Establish laboratory acceptance criteria to include timeliness of sample receipt, processing and reporting policies for samples which have exceeded these time limits
- Agree transport arrangements and temperature storage during transit



# Results

# **Technology**

- Electronic requesting by GP practices, with each kit barcoded that can be scanned on dispensing in primary care and on arrival in laboratory
- Choose automation over manual for processing at scale
- Electronic transfer of test results improves post analytical pathway



# Conclusion

Laboratories can incorporate testing of self-collected samples for HPV-based cervical screening alongside established healthcare sample taker derived screening samples.

Partnership working across organisations is critical to establish agreed protocols.

Self-sampling has the potential to increase screening coverage, particularly in women who may not participate in cervical screening.

## References

- 1. Opportunistic offering of self-sampling to non-attenders within the English cervical screening programme: a pragmatic, multicentre, implementation feasibility trial with randomly allocated cluster intervention start dates (YouScreen). eClinicalMedicine. 2024
- 2. HPValidate: clinical validation of hrHPV test system using self-collected vaginal samples in NHS England commissioned laboratories providing cervical screening services. Queen Mary University of London. 2024.