

Consultation on offering HPV self-sampling to under-screened people in the NHS Cervical Screening Programme

The UK National Screening Committee (NSC) is consulting on a recommendation to offer the option of self-sampling to some people in the NHS Cervical Screening Programme (CSP). Self-sampling for HPV testing would be offered to people who rarely or never attend their cervical screening appointment (under-screened individuals). The purpose of the proposal is to improve their engagement with the NHS CSP. Self-sampling would be offered alongside the current offer of a cervical screening test conducted by a nurse or doctor.

Background

1. Cervical screening and HPV self-sampling

Cervical screening is for women and people with a cervix who do not identify as women.

Cervical screening detects types of human papillomavirus (HPV) which can cause cells in the cervix to become abnormal. Removing these abnormal cells can prevent cervical cancer developing.

In the UK, screening currently prevents around 70% of cervical cancer deaths, but it could prevent more if everyone invited was able to attend screening regularly. Approximately 3 in 10 people do not take up the offer of cervical screening. Barriers such as pain, fear, embarrassment, and inconvenience can stop people going for cervical screening. It is important to try to remove barriers to screening participation where possible.

Evidence suggests that HPV self-sampling could help overcome some of these barriers and improve engagement with the CSP among under-screened people. Under-screened people are at a higher risk of undetected cervical abnormalities and developing cervical cancer.

2. UK evidence

The UK NSC does not currently recommend the use of HPV self-sampling in the NHS Cervical Screening Programme (CSP), based on a lack of previous evidence.

In 2017, the UK NSC gathered evidence about a series of possible changes to the NHS CSP. While the primary focus was on CSP screening intervals, the UK NSC also reviewed findings from a literature review on the addition of HPV self-sampling as an offer in the programme.

At the time, the literature review suggested that self-sampling to engage under-screened people needed further study in research projects. Responses from a 3-month UK NSC public consultation agreed that further research and piloting in a UK setting was necessary before formally implementing any HPV self-sampling strategy within the NHS CSP.

In 2021, the YouScreen study was established in the NHS England CSP in north London. It marked the first time self-sampling was integrated into the NHS. The aim of the study was to assess whether introducing the offer of self-sampling to under-screened people in the NHS CSP would substantially increase screening participation in this group. The study completed in 2024, and findings have now been published. They represent an important update to the UK evidence base, alongside other research as outlined below.

Evidence to support the consultation

1. 2024 rapid evidence review

The UK NSC commissioned a rapid evidence review of HPV self-sampling in the under-screened population. The aim of the review was to explore the published evidence relating to key UK NSC criteria on the:

- test accuracy of self-sampling;
- effect of self-sampling as a strategy to improve screening participation in under-screened people and; and
- acceptability of self-sampling.

The review sets the YouScreen results within the context of the international evidence base and should be considered alongside the study.

The review was conducted by the Glasgow University National Institute for Health and Care Research Evidence Synthesis Group. The review is a work in progress, expedited to ensure the consultation concludes in time for the March 2025 UK NSC meeting. A quality appraisal of the literature is underway and will be completed before the UK NSC makes its recommendation.

The review concluded that self-sampling is a feasible strategy for reaching under-screened people and should be considered in the national screening programme. However, the review highlighted that understanding the cost-effectiveness, logistics and implementation strategies through country-specific research and local piloting is important.

The review is included in this consultation as a separate document.

2. YouScreen trial and cost-effectiveness evaluation

The YouScreen Study was a clinical trial embedded within the NHS England Cervical Screening Programme in north London. It aimed to assess the feasibility, acceptability, and impact of offering self-sampling to non-attenders (those at least 6 months overdue their test) in practice. Self-sampling was offered opportunistically in-person in primary care and systematically via direct mailout, with kits usable at home or in the clinic. Self-sampling was offered as an alternative option, with traditional screening by a nurse or doctor still available to those who preferred it.

The study measured impact as the estimated increase in uptake and coverage of the CSP from the intervention. Secondary impact outcomes were the estimated cervical intraepithelial neoplasia grade 2 or worse (CIN2+) detection rate and the compliance to follow-up for self-sampling HPV-positives.

The study showed that offering self-sampling to under-screened people within the north London screening programme was feasible and raised coverage by 1.6% during the study period (7.5 months). Routine roll-out is estimated to increase coverage in the CSP by 7.4% over a three-year screening round. In England, this would translate to a change in coverage from 69.9% to 77.3%.

Building on the findings from the trial, the YouScreen team collaborated with the Daffodil Centre at the University of Sydney to conduct modelling that evaluated the cost-effectiveness of the YouScreen approach to offering self-sampling to under-screened people. Findings from the analysis suggest that YouScreen is likely to be cost-effective using NICE thresholds. However, in some analyses, the most cost-effective delivery strategy for YouScreen depends on the cost of the test.

Overall, the analysis concluded that offering self-sampling to under-screened people in England across a range of ages as part of the national CSP, particularly when offered in a GP setting, is estimated to be both effective and cost-effective and is likely to reduce health inequalities.

See the full [published results of the YouScreen trial](#). The subsequent cost-effectiveness analysis is included in this consultation as a separate document.

3. HPV tests

When the YouScreen study was conducted, no HPV tests were validated for use on self-collected samples. However, as the alternative for under-screened individuals was no test, and as the accuracy of testing self-samples was known to be high, this was considered ethically appropriate. Anticipating broader self-sampling use, Public Health England and NHSE conducted a study called HPVvalidate (2021–2023) to evaluate the accuracy of HPV testing of self-collected samples compared with clinician collected samples, assess user experiences, and explore future attitudes toward self-sampling.

The study identified four effective self-collection device and HPV test combinations in an English setting. These can inform kit and platform choices for under-screened people, who face higher risks of HPV and developing cervical cancer and need accessible, innovative screening approaches. The study also found that self-sampling was acceptable to people who completed provided a self-sample in a primary care setting.

Published after the Glasgow University 2024 rapid evidence review, the HPVValidate findings provide key UK evidence on self-sample accuracy and acceptability. Its findings complement the 2024 review and the YouScreen study. See [report summarising the results of the HPVValidate study](#).

Consultation recommendation

Given the evidence presented, the UK NSC is consulting on the following proposed recommendation:

Self-sampling for HPV testing can be offered to under-screened people eligible for the Cervical Screening Programme in the 4 UK countries, where service commissioners think self-sampling would be a helpful addition to the programme. If implemented, the option would be provided alongside traditional clinician-collected sampling.

Implementation should follow YouScreen's approach to enhance screening participation:

- An under-screened person is an individual who is overdue for their routine cervical screening appointment by at least 6 months or has never attended.
- The self-sampling kit delivery strategy should be based on the approach taken in the YouScreen trial – either as an opportunistic offer, direct mail-out, or both direct mail-out and an opportunistic offer, depending on the feasibility of implementing each strategy. The opportunistic strategy achieved a higher response rate than direct mail-out and is encouraged.
- Any proposals to add alternative self-sampling kit delivery strategies to the CSP should be supported by UK research evidence demonstrating their effectiveness (for example improved uptake and/or improved detection and treatment of CIN2+).
- Tests and associated workflows which have been validated in the UK for use in self-sampling should be used. For example, those included in the HPVValidate study can inform the choice of self-sampling kits and testing platforms for under-screened people in the CSP.
- Appropriate information should be developed to facilitate personal informed choice to participate in the screening programme.

Get involved

You are invited to participate in and respond to this consultation. Responses to the consultation will be presented to the UK NSC and will help to inform the committee's recommendation.

UK NSC consultations provide an opportunity for stakeholders to:

- make an overall statement of their views on self-sampling in under-screened people as a strategy to improve engagement with the cervical screening offer and on the quality and accuracy of the supporting documentation
- draw attention to disagreements with any aspects of the documents, including their conclusions and / or the proposed recommendation
- highlight potential inconsistencies in the interpretation of the evidence which has been included in the documents
- comment on whether the recommendation is consistent with the evidence which has been presented
- comment on the feasibility of the recommendation
- alert the committee to questions or evidence which may have been omitted by the documents and which may contribute to the recommendation or its revision
- suggest amendments to important errors in the wording of the documents or the proposed recommendation

Consultation details

This consultation will run for 3 months between 4 December 2024 and 26 February 2025.

More information and the consultation response form can be found on the UK NSC's [cervical screening recommendation page](#).