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Supporting Information

Supplementary methods

**This appendix was part of the submitted manuscript and has been peer reviewed.
It is posted as supplied by the authors.**

Appendix to: Creagh NS, Zammit C, Brotherton JML, et al. Self-collection cervical screening in the renewed National Cervical Screening Program: a qualitative study. *Med J Aust* 2021; doi: 10.5694/mja2.51137.

1. Description of the difference between the clinician-collected cervical screening samples and the self-collection cervical screening sample

The conventional cervical screening pathway begins with screening participant undergoing a pelvic examination, with the practitioner using a speculum to visualise the cervix and take a sample from the cervix. By contrast, the self-collection pathway begins when the practitioner provides a woman with a flocked swab and instructions on how to collect her own sample of vaginal cells. Typically, women take the sample behind the curtain in the clinician room, in the clinic toilet or in some cases, women have been able to take the collection kit home after a consultation with a healthcare provider, collect the sample there and return it to the clinic.

Details about the clinical pathways for self-collection in the NCSP can be found here: [https://wiki.cancer.org.au/australia/Clinical_question:Self-collected_vaginal_samples]

2. Developing the sampling frame

We developed a robust sampling frame of screening participants and practitioners to be invited to participate in the study using de-identified descriptive statistics of the users of the self-collection cervical screening pathway between 1 December 2017 (the commencement of the rNCSP) and 30 April 2019 (the commencement of the study) provided by VCS. This ensured that the samples of screening participants and practitioners invited were broadly representative of the population from which they are drawn, maximizing the spectrum of experiences that could be captured.

The sample of invited screening participants were stratified by age (30–39 years, 40–49 years, 50 or more years), location of the screening participants at the time of the self-collection test (metropolitan or rural area), screening status (overdue for screening by for screening by 2–3 years, 4–7 years, 9 or more years, never screened) and outcome of the self-collection cervical screening test (HPV-negative, HPV-positive (types 16/18), HPV-positive (not types 16/18). Because of limitations in the completeness of data held by the registry, the sampling frame could not be stratified by ethnic background, however participants were asked to self-disclose their ethnic identity at the time of the interview.

The sample of invited practitioners was stratified by practitioner type (general practitioner, nurse practitioner, or other practitioner types, including obstetrician/gynaecologists and practitioners based in hospitals), location of place of practice (metropolitan or rural area), and the number of pathology requests for self-collection testing of patients ("volume of use": 0–6 requests, 7–12 requests, 13 or more requests).

A total of 193 screening participants were invited to participate in semi-structured interviewed, of whom 45 consented to participation. Fifty practitioners were invited to participate in semi-structured interviews, of whom 18 consented to participation in the study.

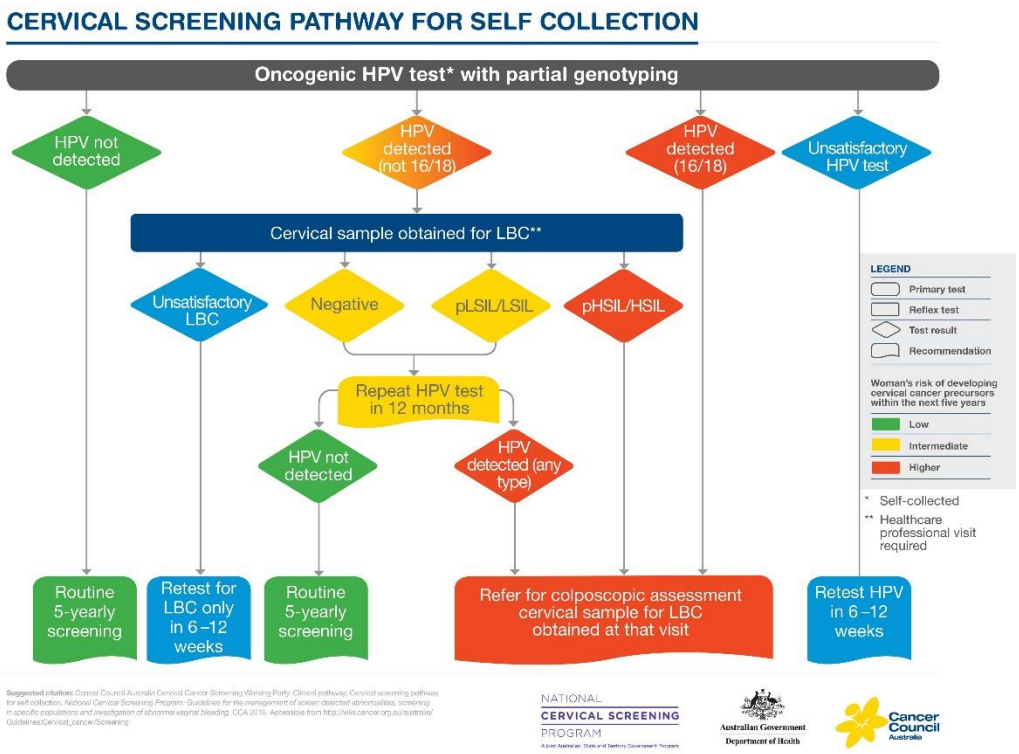
3. Final coding frameworks for the screening participant and practitioner samples

Screening participants	
Theme	Nodes
1. Experience with cervical screening before self-collection	• Perception of clinician-collected cervical screening • Barriers to clinician-collected cervical screening - Psycho-social factors - Previous negative experience - Nature of the test - No perceived importance of screening • Facilitators to clinician-collected cervical screening - Opportunistic screening - Reminder system
2. Screening participant's journey to the start of the self-collection pathway	• Prior knowledge of self-collection • How screening participants came to undertake cervical screening - Practitioner initiated cervical screening - Screening participants initiated cervical screening • Facilitators that supported the acceptability of offer of self-collection - Practical reasons - Practitioner's approach - Confidence about the completion of the test - Perceived importance of screening • Explanation of the self-collection pathway
3. Screening participant's completion of the self-collection test	• Location of completion - Home setting - Primary care setting • Experience completing the test • Instructions and materials • Perception of the self-collection swab
4. Screening participant's experience with the follow-up pathway after completion	• Explanation of results • Outcome of screening - HPV+ - HPV– • Experience with follow-up care - HPV+ (16/18) pathway - HPV+ (not 16/18) pathway

Screening participants	
Theme	Nodes
5. Acceptability and overall perception of the self-collection pathway	• Acceptability of the self-collection pathway - Empowerment - Less invasive – reduced impact of psycho-social factors - Practical reasons – fast, simple, quick - Reduced pain • Barriers of the self-collection pathway - Accuracy of the sample - Completing the test accurately - Practitioner's approach - Knowledge about self-collection more broadly - Limited information about the test - Concerns about the difference between Self Collection and a usual CST (Cervical Screening Test) • Future intentions and goals - Intention to participate in clinician-collected cervical screening - Intention to participate in self-collection cervical screening - No intentions

Practitioners sample	
Theme	Nodes
1. Practitioner's perception of under-screened and never-screened screening participants	• Demographics of under-screened women • Perceived barriers to cervical screening from practitioner's perspective
2. Practitioner's views and perception of self-collection and rNSCP	• Motivation • Up-skilling and knowledge sharing • Acceptability and effectiveness - Cultural sensitivity - Effectiveness (reach and accuracy) - Acceptability (uptake)
3. Integration of the self-collection pathway into clinical practice	• Roles and responsibilities • Practitioner behaviour • Organisational procedures & Capacity - Identification - Refusal of clinician collected cervical screening test - Offer of self-collection - Self-collection process - Discussion of results - Follow up or referral
4. Experienced barriers and facilitators to implementation of self-collection	• Individual level • Organisational level • System level

4. Cervical screening pathway for primary oncogenic HPV testing using self-collected samples, as outlined in the clinical practice guidelines*



* Source: Canfell K, Saville M, Smith M, et al; Cancer Council Australia Cervical Cancer Screening Guidelines Working Party. Self-collected vaginal samples [National Cervical Screening Program: guidelines for the management of screen detected abnormalities, screening in specific populations and investigation of abnormal vaginal bleeding]. Updated Feb 2021. https://wiki.cancer.org.au/australia/Clinical_question:Self-collected_vaginal_samples.