Self-collected cervical screening testing in the antenatal population.

Northern Health

Dr Nadia Olivier[1] and Dr Josephine Vivian-Taylor[1]

1 Northern Health

Background

- Cervical cancer accounts for 1.3% of all new female cancer diagnoses in 2022 and accounted for 222 deaths in 2022. (1)
- Since 2017, cervical screening in Australia has shifted to primarily testing for human papilloma virus (HPV) (HPV 16, HPV 18, HPV others-non 16/18) every 5 years due to HPV detection in 99.7% of cervical cancers for people with a cervix from age 25. (2)
- Self collected cervical screening became a standard alternative collection method on July 1st 2022. (3)
- Cervical cancer is more likely to be diagnosed in never screened or under-screened women. Self-collection is safe in pregnancy and should be offered. (3)

Methods

A retrospective cross-sectional audit of cervical screening status of the antenatal population at Northern Health pre and post implementation of self-collection option for cervical screening.

- Deliveries from January-March 2022 versus January-March 2023 at Northern Health identified through decision support unit (DSU).
- Demographic & birth data obtained from DSU. Cervical screening status checked through Provider Digital Access (PRODA) on National Cancer Screening Register.

Aims

Evaluate the uptake of cervical screening in the antenatal population at the Northern Hospital pre and post implementation of self-collected cervical screening.

Results

Tab 1. Maternal demographics of antenatal population pre & post self collection.

Maternal Characteristics	Pre-self collect (n = 705)	Post self collect (n=679)
Age at delivery, median (IQR)	32 (29, 35)	33 (29, 36)
BMI, mean (SD)	27.4±7.6	27.5±7.4
Nulliparous, n (%)	200 (28.4)	234 (34.5)
Interpreter use, n (%)	92 (13.0)	81 (11.9)
Born in Australia, n (%)	286 (40.6)	295 (43.4)

In both groups, 44.5% of people were up to date with cervical screening at the start of pregnancy (pre n=314/705, post 302/679).

Tab 2. Cervical screening status pre & post self collection.

	Pre-self collect (n = 705) %			Post self collect (n=679) %		
	At time of delivery		3 months post partum	At time of delivery		3 months post partum
Up-to-date	48.7	→	56.0	58.0	→	62.2
Under screened (overdue)	21.8	→	18.2	12.2	→	11.3
Never screened	29.5	→	25.8	29.7	→	26.5

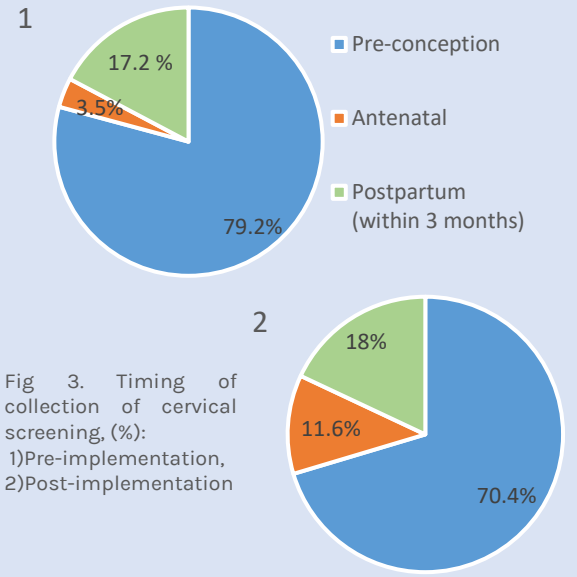

Fig 3. Timing of collection of cervical screening, (%): 1)Pre-implementation, 2)Post-implementation

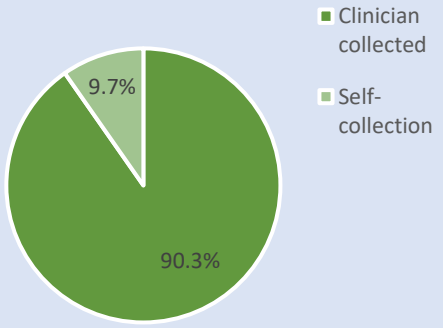

Fig 4. Method of collection in post implementation self-collected screening, (%)

Of those who collected antenatally – 25/49 (51.0%) opted for self-collection, post implementation.

Conclusions

- Cervical screening rates increase 3 months postpartum in comparison to commencement of pregnancy (pre-11.5%, post-17.7%), however post implementation of self-collection the rates of cervical screening in the antenatal population increased by 6.2%.
- Women are prompted to perform cervical screening in the postpartum period.
- Self-collection appears to be an acceptable option during the antenatal period and may improve the rates of cervical screening in this population.

Limitations & future directions

- Inter-clinician variation in discussing & offering cervical screening testing.
- The feasibility of providing self-collected screening by form of mail collection to access remote communities.
- Integrating cervical screening testing into routine antenatal care.

References

1. Cancer Australia. Cervical cancer in Australia Statistics Australia: Australian Government; 2024 [updated 2024. Available from: https://www.canceraustralia.gov.au/cancer-types/cervical-cancer/statistics.
2. Cancer Council. Understanding your Pap smear or cervical screening test results: Cancer Council; 2024 [Available from: https://www.cancer.org.au/cancer-information/causes-and-prevention/early-detection-and-screening/understanding-your-cervical-screening-test-results.
3.Council C. Self-collected vaginal samples Australia: Cancer Council; 2022 [updated 01/07/2022; cited 29/02/2024 29/02/2024]. Available from: https://www.cancer.org.au/clinical-guidelines/cervical-cancer/cervical-cancer-screening/management-of-oncogenic-hpv-test-results/self-collected-vaginal-samples.