

Cervical Cancer Surveillance among Women in Davidson County, Tennessee, United States : 2008 - 2018

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Introduction

Human papillomavirus (HPV) is among the most prevalent sexually transmitted diseases and the cause of most cervical cancer.

Annual incidence of cervical cancer per 100,000 women:

- 8.0 in the United States,
- 8.4 in Tennessee
- 6.2 in Davidson County, Tennessee

Cervical cancer is preventable through HPV vaccination and routine screening. In this study, we aimed to determine:

- Screening history of women leading up to cancer diagnosis.
- Socio-demographic and clinical characteristics of these women.
- Potential social barriers to screening.

Methods

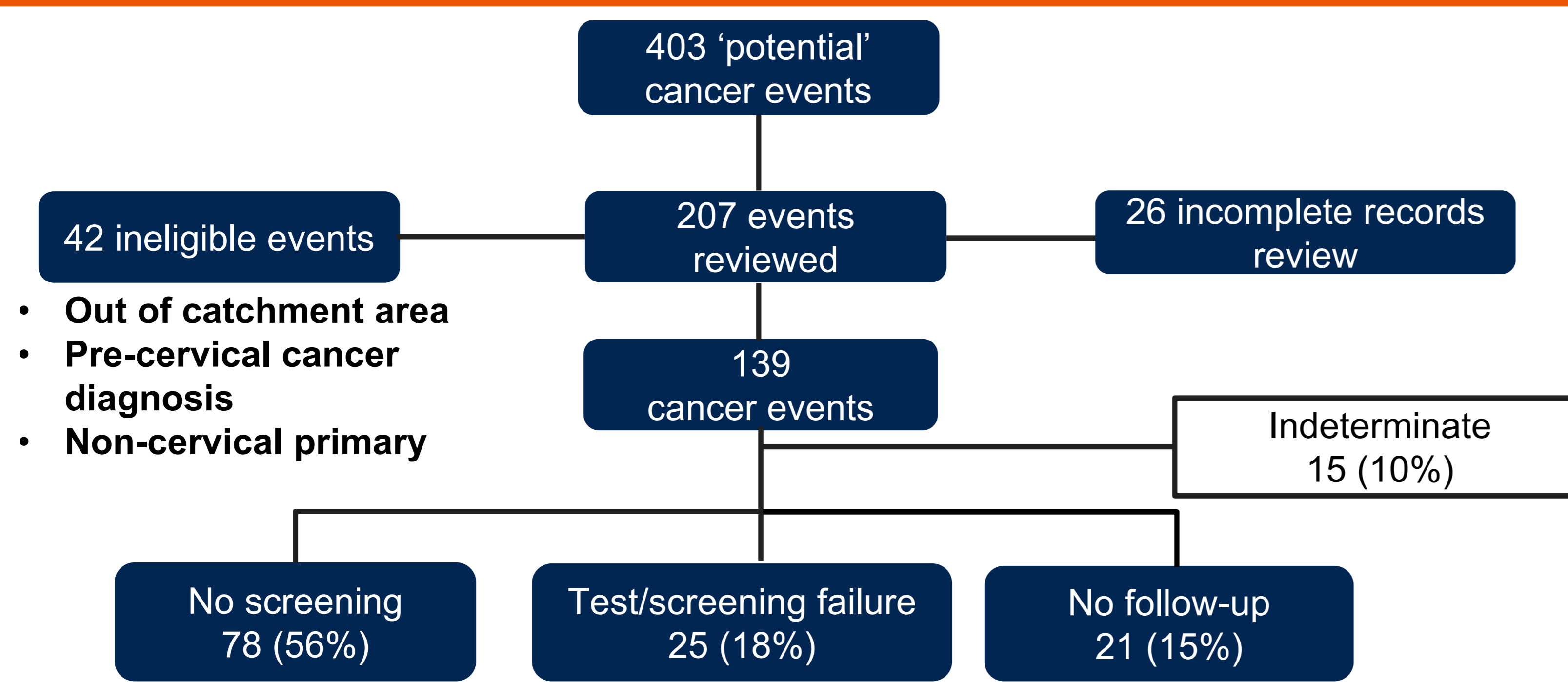
Medical records review of women with cervical cancer identified from Tennessee Cancer Registry data: Davidson county resident aged 18 years and above, diagnosed 2008 – 2018.

Abstracted information on patient demographics, clinical characteristics and potential barriers to screening in the 5-year period prior to diagnosis.

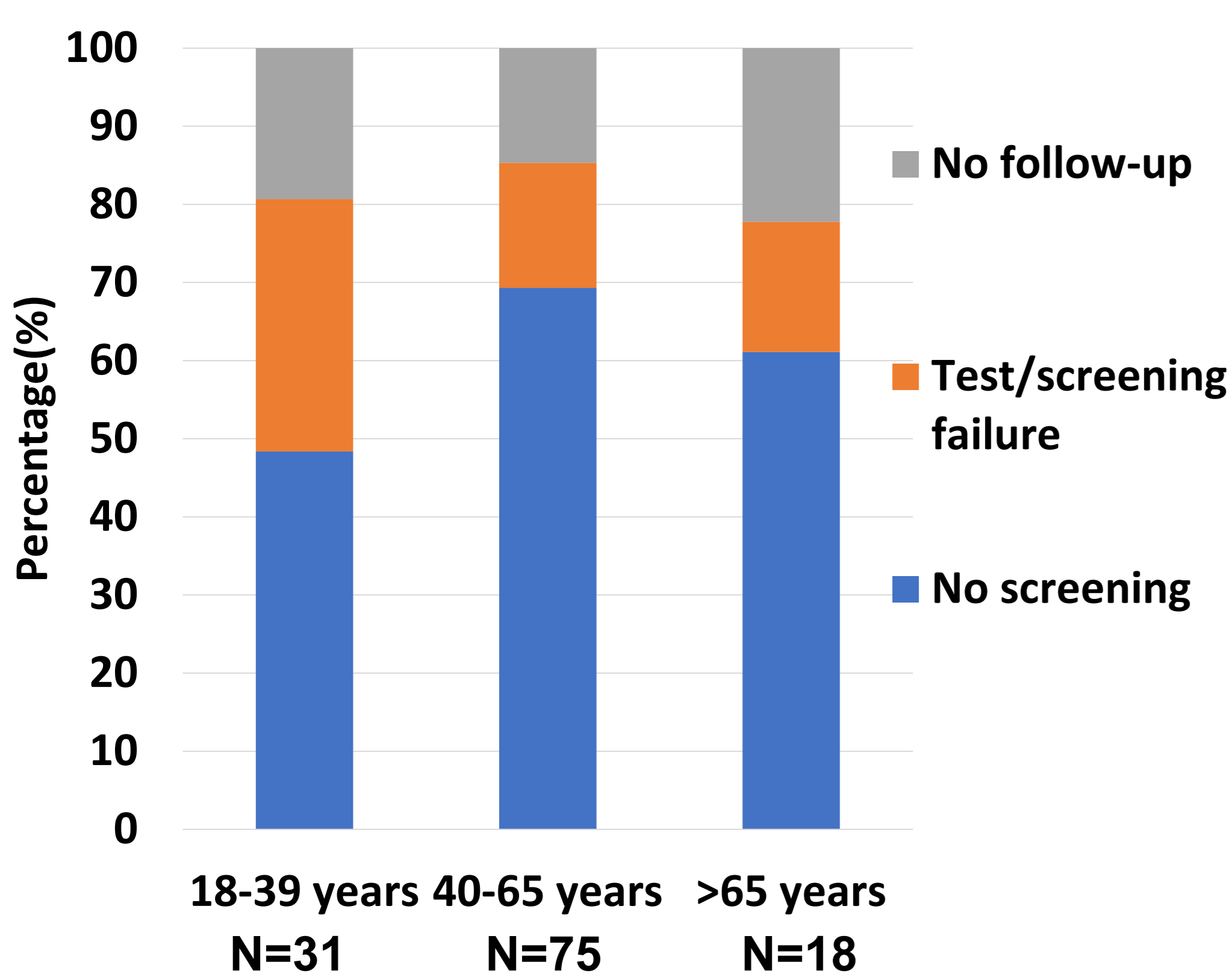
Screening history of the women, classified as follows:

- **No screening:** No record of Papanicolaou (Pap) test in 3.5 years or no Pap and/or HPV co-test in 5.5 years prior to diagnosis; tests in prior 6 months excluded.
- **Test/screening failure:** Appropriate screening and/or follow-up management yielded false-negative results.
- **No follow-up:** >6 months or >12-month lapse between abnormal screening test and follow-up management dependent on severity of screening test result.

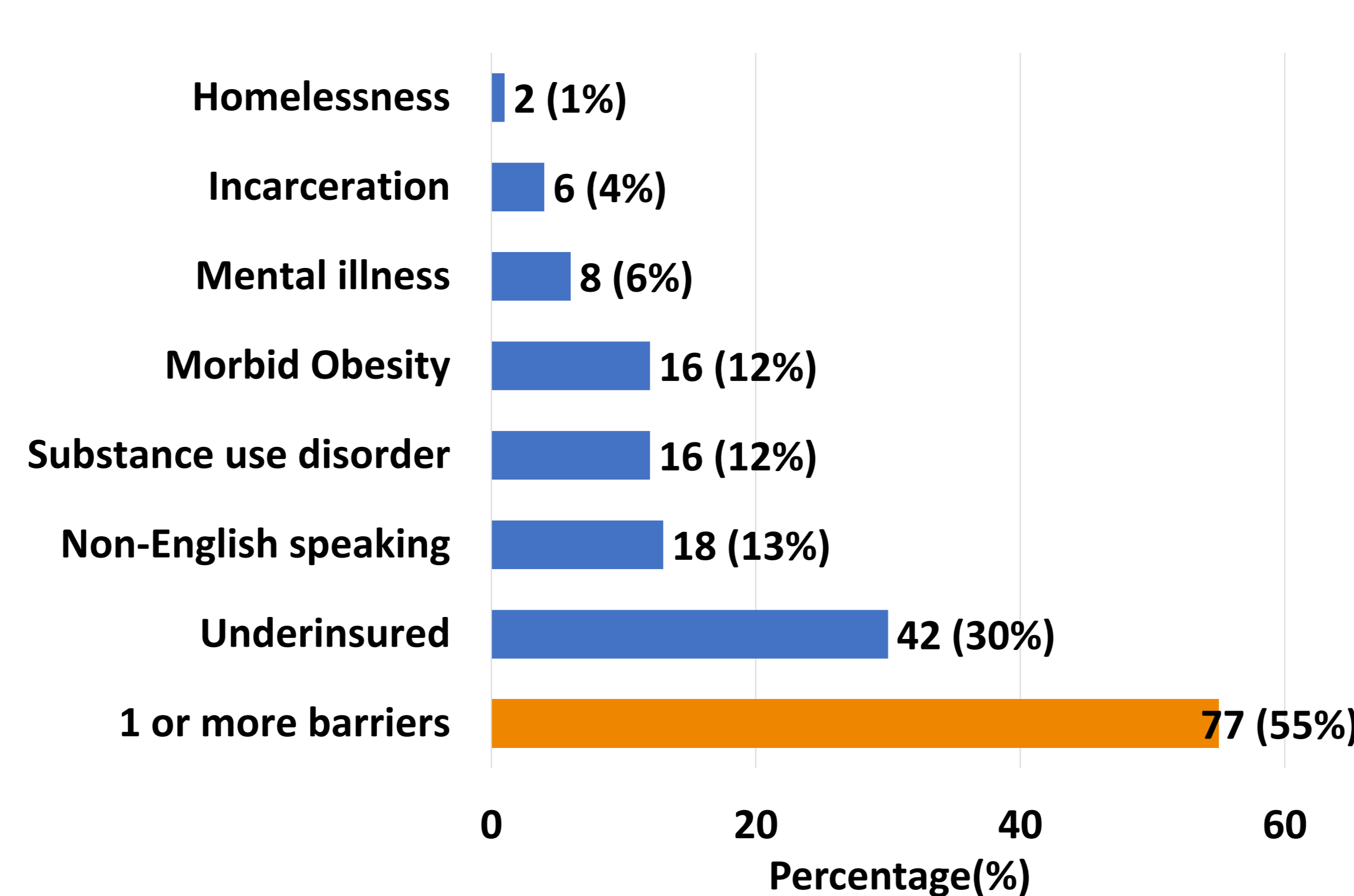
Results



Screening History by Age group



Social barriers to screening



Characteristic	# of Women (%)
Age Groups	18 – 39 years: 35 (25)
	40 – 65 years: 85 (61)
	65+ years: 19 (14)
Race/Ethnicity	White: 65 (47)
	Black: 29 (21)
	Hispanic: 16 (11)
	Other/Unknown: 29 (21)
Health Insurance	Private: 54 (38)
	Public: 68 (48)
	None/Unknown: 17 (12)
Histology type	Squamous: 91 (66)
	Non-squamous: 46 (33)
	Unknown: 2 (1)
Cancer Stage	I - II: 96 (69)
	III - IV: 30 (22)
	Unknown: 13 (9)
Symptoms at diagnosis	Yes: 110 (80)
	No/Unknown: 29 (20)
Smoking status	Yes: 69 (50)
	No/Unknown: 70 (50)
Immunocompromised	Yes: 7 (5)
	No/Unknown: 132 (95)

Limitations

- Screening history records ascertained through medical records may be incomplete.
- Social barriers to screening were identified through patient medical records and cannot be directly implicated as contributory factors to inadequate screening and/or follow-up management.
- Convenience sample (51% of potential cases) reviewed may not be representative of cervical cancer in Davidson County, Tennessee, and may not reflect screening histories of women elsewhere.

Conclusions

- No screening and/or inadequate follow-up associated with 71% of cervical cancer cases.
- 80% of women with cervical cancer presented with symptoms and 22% presented with late stage cancer.
- Potential barriers to screening such as inadequate health insurance coverage, serious mental illness and language barriers were commonly reported among women diagnosed with cervical cancer.
- These results emphasize the need for ways to assure implementation of recommended screening and follow-up guidelines.

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