



Spotlight on Women's Health Cyberseminar Series

Sponsored by the VA Women's Health Research Network

Cervical cancer screening in VA: Unique individual and health system challenges

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VA Cyberseminar

February 15, 2022



Disclosures

- I have no conflicts of interest to disclose

Overview

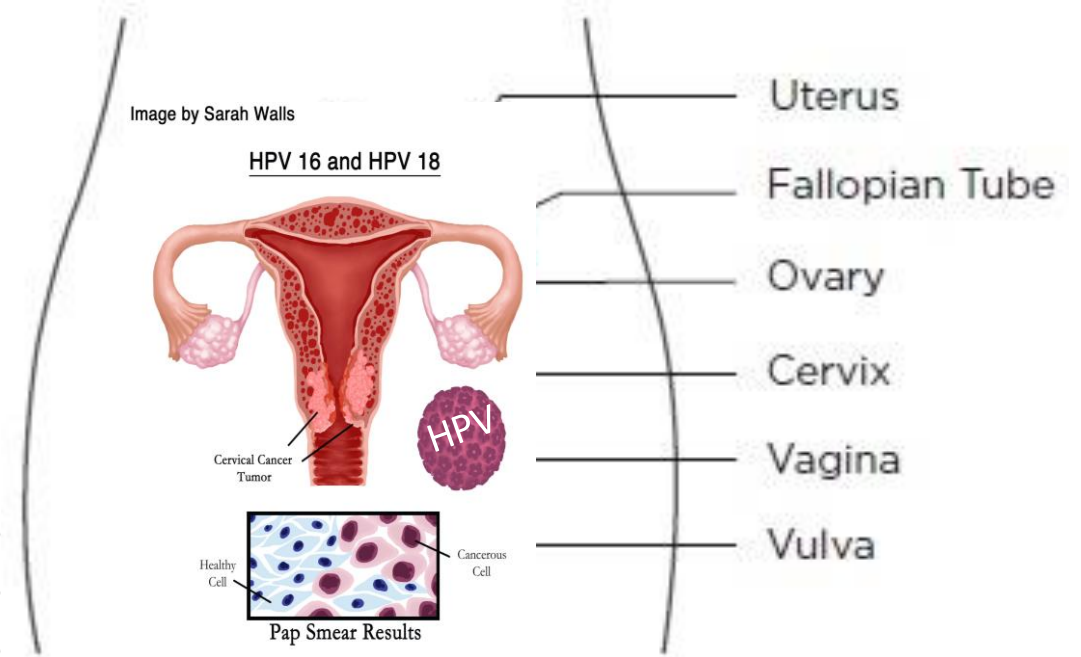
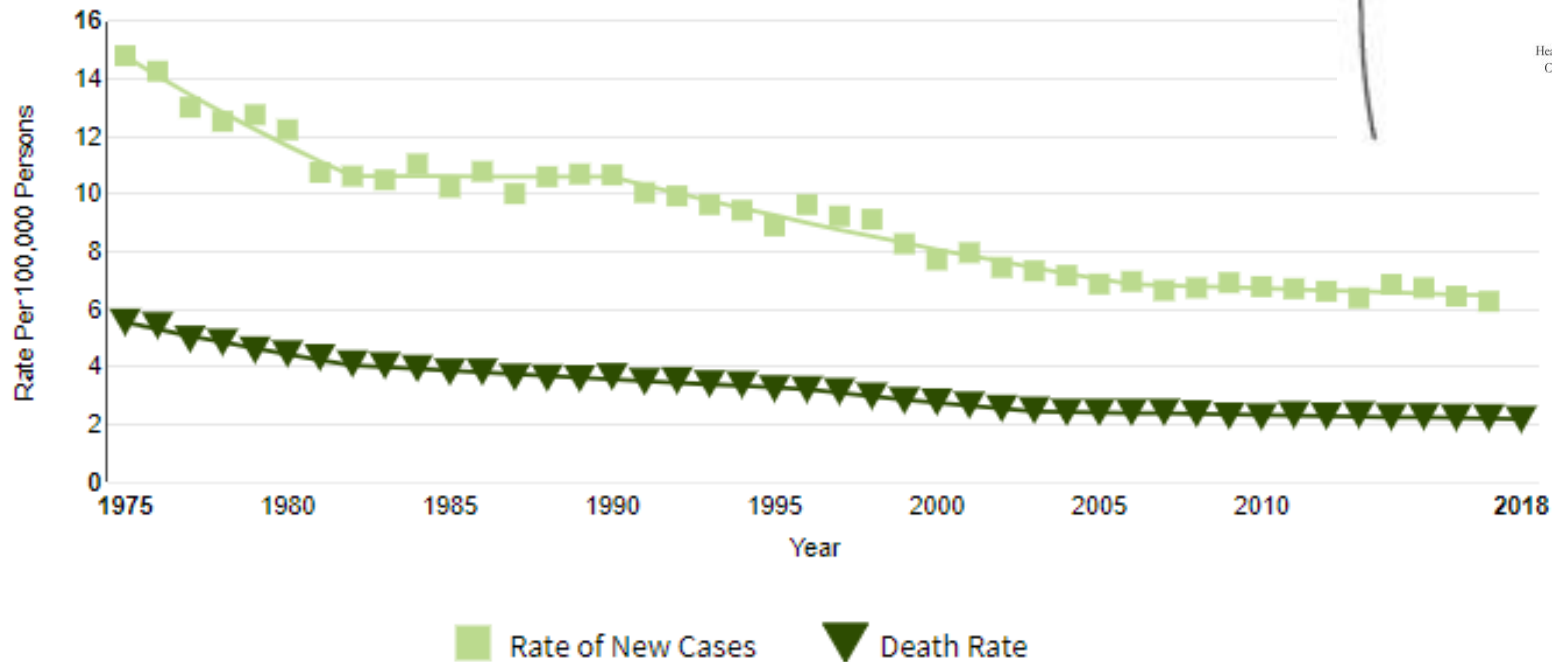
1. Background
2. Common risk factors for cervical cancer that are prevalent in VA
3. What are the unique challenges about cervical cancer screening in VA?
4. Policy and operations solutions (Dr. Haskell)



Cervical Cancer

2021 U.S. Estimates:

- 14,480 new cervical cancer cases
- 4,290 cervical cancer deaths



HPV Vaccination

December 2021

October 2020

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

HPV Vaccination and the Risk of Invasive Cervical Cancer

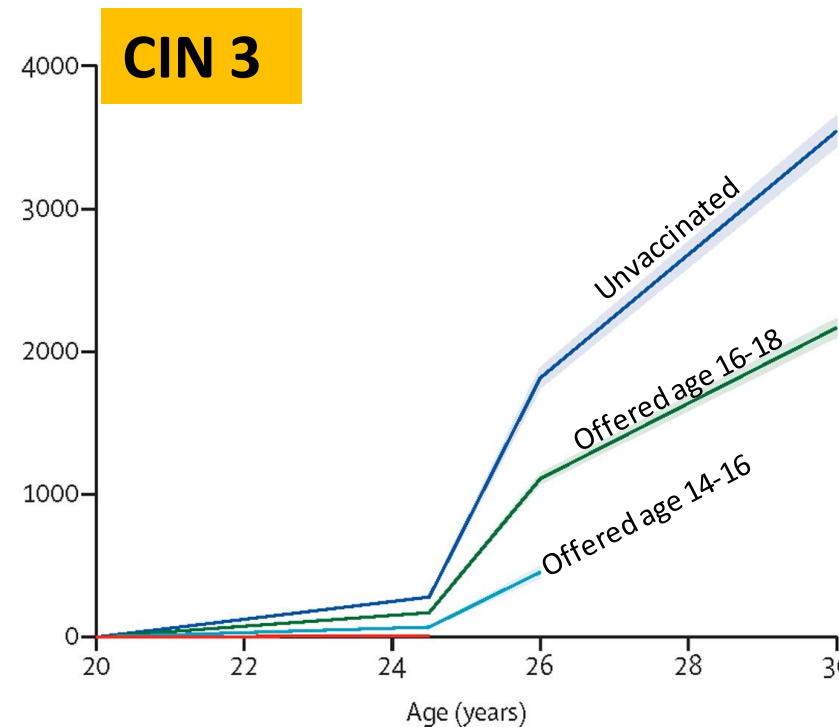
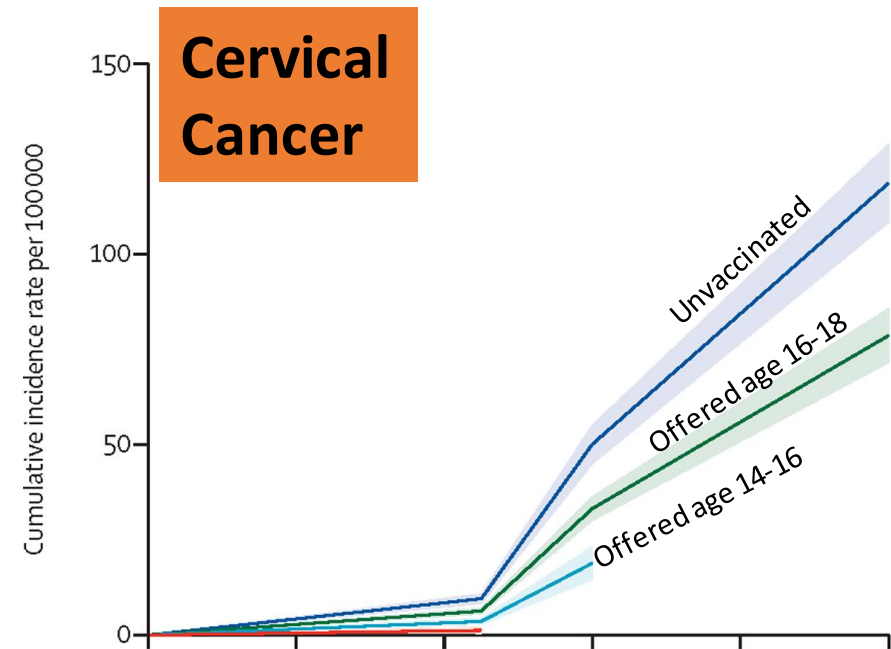
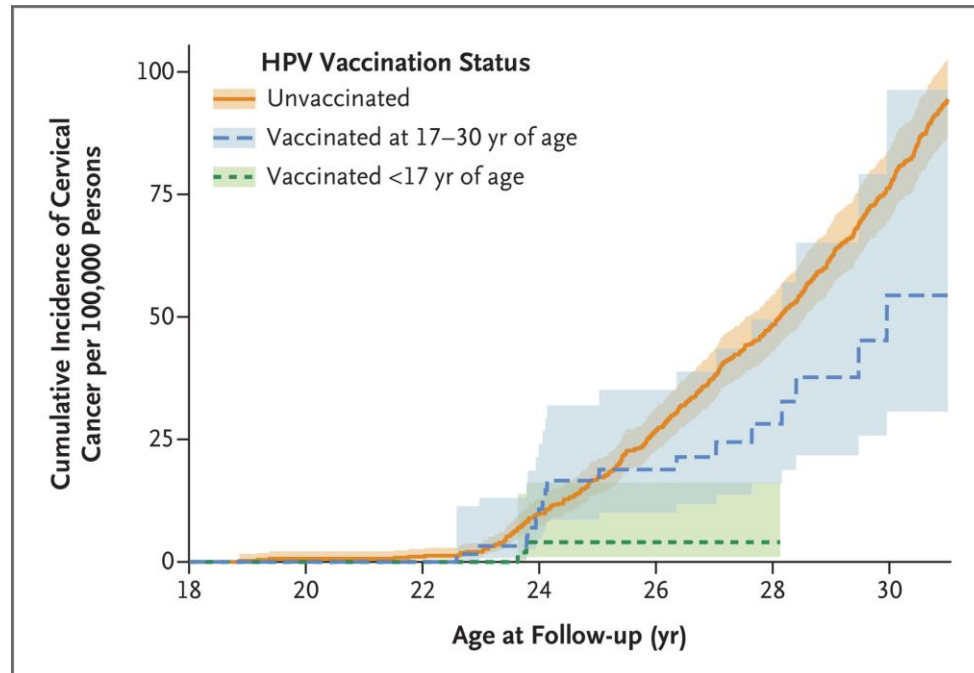
Jiyao Lei, Ph.D., Alexander Ploner, Ph.D., K. Miriam Elfström, Ph.D., Jiangrong Wang, Ph.D., Adam Roth, M.D., Ph.D., Fang Fang, M.D., Ph.D., Karin Sundström, M.D., Ph.D., Joakim Dillner, M.D., Ph.D., and Pär Sparén, Ph.D.

New: Real-world effectiveness studies demonstrating reduction in cervical cancer incidence in Sweden and England



The effects of the national HPV vaccination programme in England, UK, on cervical cancer and grade 3 cervical intraepithelial neoplasia incidence: a register-based observational study

Milena Falcaro, Alejandra Castañon, Busani Ndlela, Marta Checchi, Kate Soldan, Jamie Lopez-Bernal, Lucy Elliss-Brookes, Peter Sasieni



Screening in the HPV vaccine era

- Population-level impact of HPV vaccine is decades away in US
 - Improved screening in the interim will prevent thousands of cancers
- Shift to HPV-based screening (enhanced negative predictive value)
 - Co-test or Primary HPV test every 5 years
- Management guidelines increasingly complex
 - Published April 2020



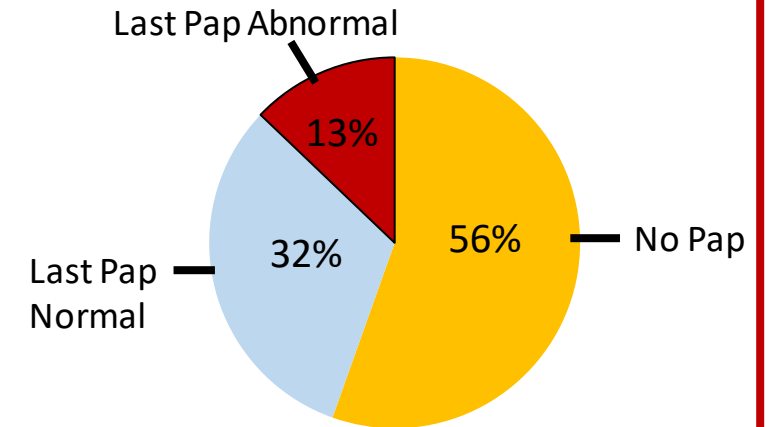
Risk factors for Cervical Cancer

(1) HPV infection/ persistence



- **Lower screening rates:**
 - Uninsured or no usual source of care
 - Rural area
 - Older women
 - Lower health literacy/education
 - Female sexual partners
 - Transgender
 - Severe mental illness
 - Disabilities
 - +/- Sexual assault

Insured women diagnosed with cervical cancer



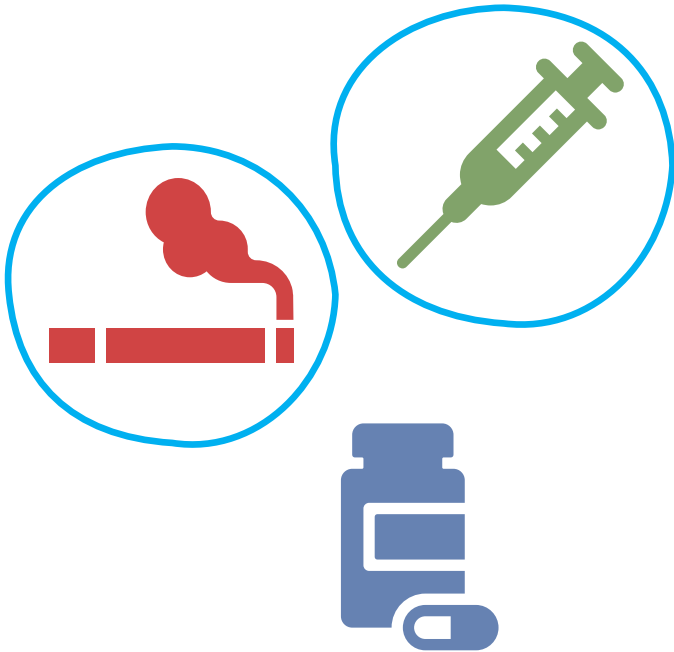
Leyden, JNCI 2005

Risk factors for Cervical Cancer *in VA*

(1) HPV infection/
persistence

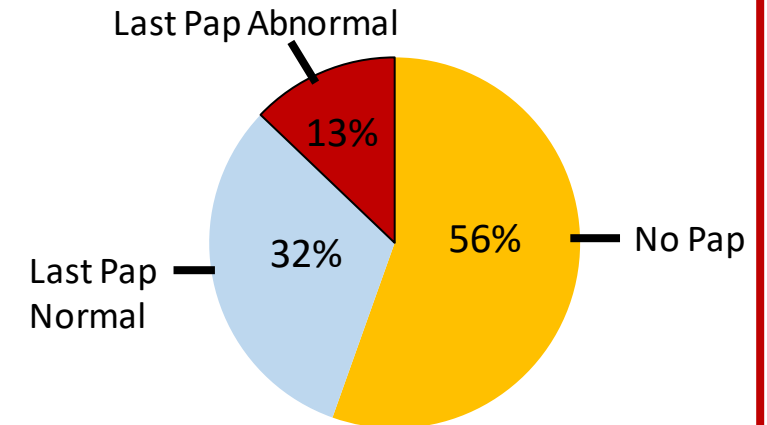
(2) Inadequate
screening

(3) Inadequate
follow-up



- **Lower screening rates:**
 - Uninsured or no usual source of care
 - Rural area
 - Older women
 - Lower health literacy/education
 - Female sexual partners
 - Transgender
 - Severe mental illness
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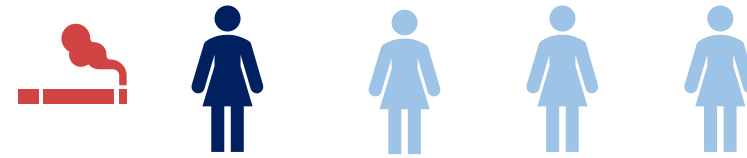
Insured women diagnosed with
cervical cancer



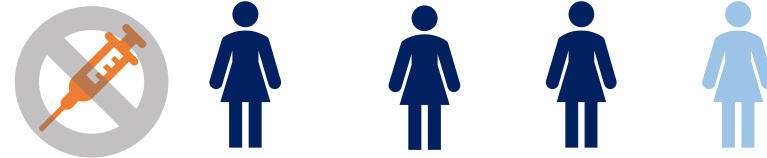
Leyden, JNCI 2005

Risk factors for Cervical Cancer *in VA*

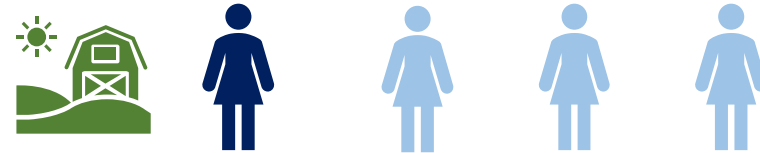
- ✓ 1 in 4 smokes cigarettes
- ✓ 75% ages 19-26 not vaccinated against HPV when arrive at VA
- ✓ 25% live in rural areas
- ✓ Women Vets ages 50-64 less likely to be screened in past 3 years than women 21-29



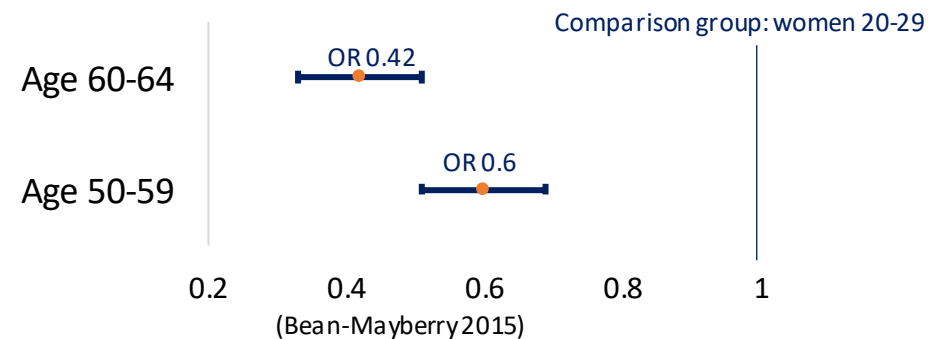
(Brown 2010; Duffy 2012; Farmer 2011; Weinberger 2016)



(Nobel 2019)



(Frayne 2018)



CLINICAL EXPERIENCE:

“I have worked with all kinds of patient populations in different systems throughout my healthcare career and [the VA has] probably been the most difficult population in which to perform these types of examinations”

- VA Women's Clinic Physician

What is unique about cervical cancer screening in VA?



Data Sources

- **Women Veterans Health Utilization and Experiences Survey, 2015**
 - PI: Elizabeth Yano, PhD
 - 12 VAMCs, 9 States
 - 1,395 participants
 - ≥ 3 visits in primary/women's health care in past year
 - *Linked VA EHR data* for a subset
- **Interviewing women Veterans and health system stakeholders about Pap experiences and self-collected HPV testing (iPAP) study:**
 - Individual interviews 20 women Veterans who receive care at the Minneapolis VA, and who have had an uncomfortable experience with a pelvic exam or Pap
 - Individual interviews with 27 VA health system clinicians, staff, and leadership

VA HEALTH SYSTEM STAKEHOLDERS

“Like they’re really tense -- like, the tension is palpable, you know?”

I don’t know if it’s just the trauma, if it’s the mistrust of physicians, if it’s the -- I don’t know. But there’re a lot of people who breathe a lot of sighs of relief when it’s all done and you take the speculum out, and they’re, like, you can just hear them, like, palpably exhale, you know?”

- VA Women’s Clinic Physician

Research Question 1

Among women Veterans who use VA care, what individual patient characteristics and experiences are associated with pelvic exam anxiety, discomfort, and distress?



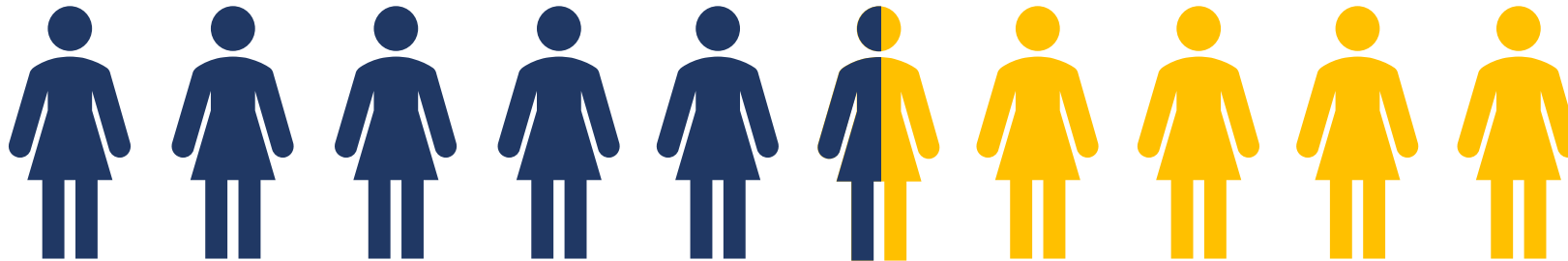
“Thinking now about how much, if any, discomfort, distress or anxiety you might feel about having a pelvic exam... On a scale from 0 to 10, what number would you choose to rate your level of distress or anxiety about having pelvic exams?”

SEXUAL TRAUMA PREVALENCE



About **1 in 3** women and **1 in 6** men in the U.S. experienced some form of contact sexual violence during their lifetime.

55% of women veterans who use VA primary care have experienced sexual assault



(n=743 of 1,348)

VA HEALTH SYSTEM STAKEHOLDERS

“[a high proportion of our patients have] a past history of some sort of sexual trauma that may or may not have occurred in the context of their military service. A number of these veterans are re-traumatized when we have to do an invasive, sensitive exam, like a pelvic examination in order to perform a Pap smear”

“I think our veteran patient population is very unique with the amount of trauma that they have experienced. In general, it seems to be much greater than I have seen in other patient populations.”

- VA Women's Clinic Physician

PATIENT VOICES

“... my sexual trauma was from a doctor, so you know just having an exam was, you know, not easy.”

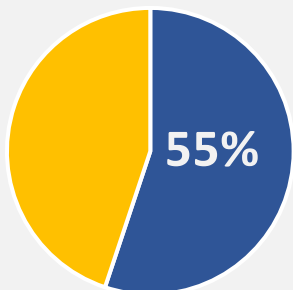
Sexual trauma → physical and mental health

- 50-60% of rape survivors develop PTSD
- Sexual assault + PTSD →
 - Higher rate of beliefs that pelvic exams are unnecessary or unsafe
- Sexual assault →
 - Higher rate of abnormal Pap among women Vets
 - More than two-fold increased cervical cancer risk

Sexual trauma & MH survey measures

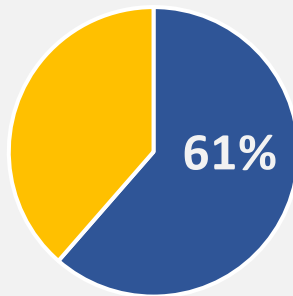
Sexual Assault

“Sexual contact against your will, or when you were unable to say no.” at any time point



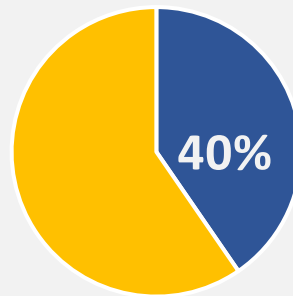
MST

Assault or “unwanted, threatening, or repeated sexual attention” during military service



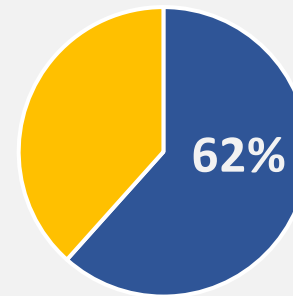
PTSD

Measured with an abbreviated two-item PTSD checklist



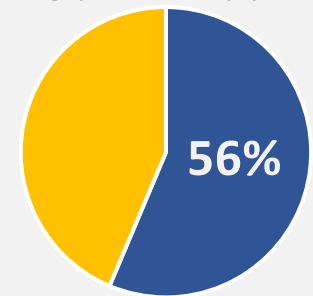
Anxiety

Measured using the GAD-2 anxiety screener.

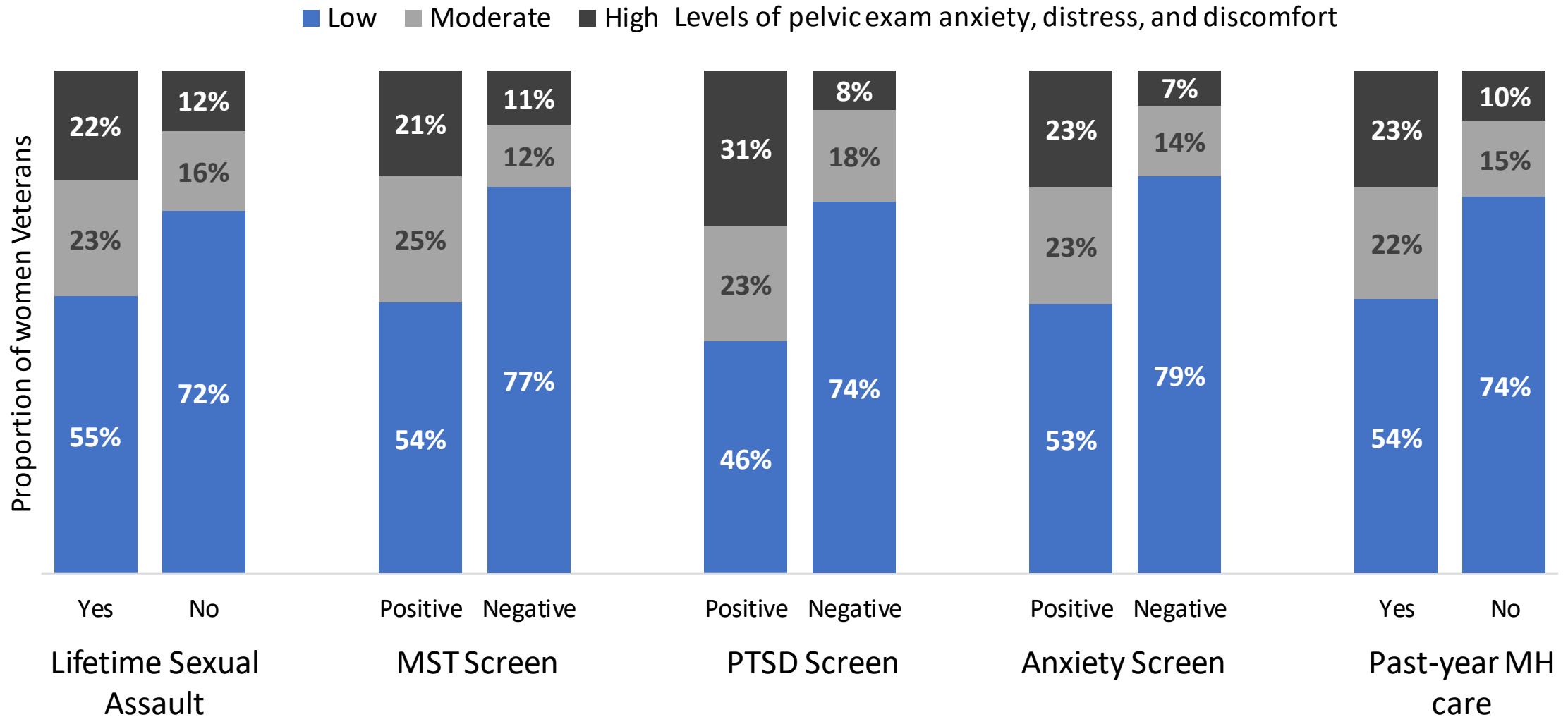


MH care

“Care or support for coping with anxiety, depression, or PTSD, or to handle alcohol or drug addiction, or peer or group or individual therapy or support to help with coping with difficulties in life, including peer support”



Sexual trauma and mental health symptoms are associated with higher pelvic exam anxiety, distress, and discomfort



VA HEALTH SYSTEM STAKEHOLDERS

“We have had a lot more focus on and working on trying to make women feel more welcome in our environments and trying to design care that looks more like what they’re looking for”

- VA Facility Chief Experience Officer

Research Question 2

Among women Veterans who use VA care, what healthcare system experiences are associated with pelvic exam delay?



“In the last 12 months, have you delayed, or put off, or gone without getting a pap smear or other gynecological exam that you needed, or that was recommended for you, specifically because of feelings of discomfort, distress, or anxiety about having that kind of exam?”

PATIENT VOICES

“Recently, I had a male veteran -- I’m assuming he was a veteran cause he wasn’t wearing a -- an employee tag. And I’m assuming he wasn’t a random person off the street.

But he accused me of not being a veteran. He said I should never come back to the VA. He -- he -- he was just really rude. And it was horrible. It was actually horrible. And I was actually afraid.

I went back inside, because he did this as I was leaving the hospital. I went back inside and asked for an escort to my car.”

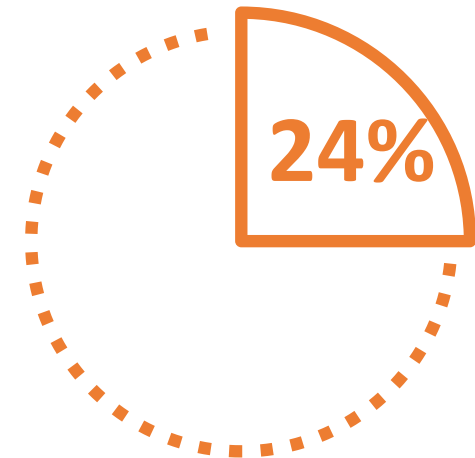
Stranger Harassment

- Safe and comfortable environment reduces feelings of exposure or vulnerability
- Stranger Harassment = “Unwanted or intrusive attention in public places”
- 1 in 4 women Veterans experiences harassment
 - More commonly reported if trauma, MH conditions, fair/poor health
 - More likely to report feeling unwelcome or unsafe at VA, delay medical care



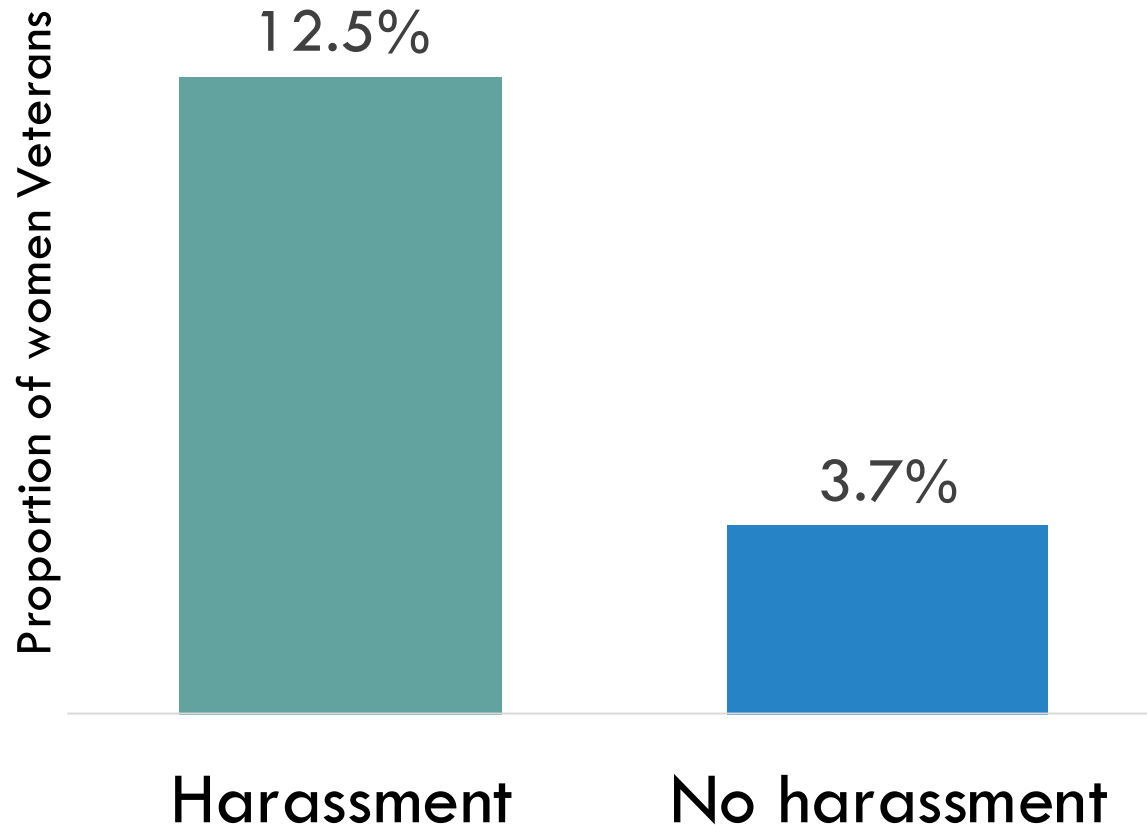
Harassment measure

As a woman Veteran when visiting your VA for care in the past 12 months: How often, if ever, did you feel you experienced inappropriate or unwanted comments or behavior toward you from male Veterans?



Responses dichotomized as ever/never

PELVIC EXAM DELAY IN THE PAST 12 MONTHS



Multivariate model adjusting for exam distress and sociodemographics:

aOR **11.5**, 95% CI 2.2, 60.7 (Low distress)

aOR **2.1**, 95% CI 1.03, 4.1 (Mod/high distress)

PATIENT VOICES

“When he was doing the exam, ...he had the skin grabbed and I was trying to explain it to him and he, you know, bats my hand away.”

“I said I’m not going to pull the thing away, but I’m letting you know you’ve got skin trapped in there, and then he was just like, “Let me be the doctor, you just lay there,” and as he tightened it or clicked it or did whatever he did, it still had the skin trapped.

And I said “I’m telling you right now, you’ve got skin trapped.” And I said. “If you click it one more time, I said, there’s going to be a foot going up somebody’s head,” I said, because there’s skin trapped in there. And I could tell it was literally, it would have had to have drawn blood at that time. And then when he released it and he pulled it out he said, “Oh yeah, we sure did have skin trapped in there.””

Provider communication

- Doctor-patient communication builds trust, exchanges health information and enables clinical decision making
- Women report understanding and control, less pain, embarrassment, and trauma during pelvic exams if they:
 - Receive explanations
 - Time for questions
 - Warned prior to painful procedures
- Good communication →
 - More likely to follow clinician recommendations
 - Increased cancer screening behavior



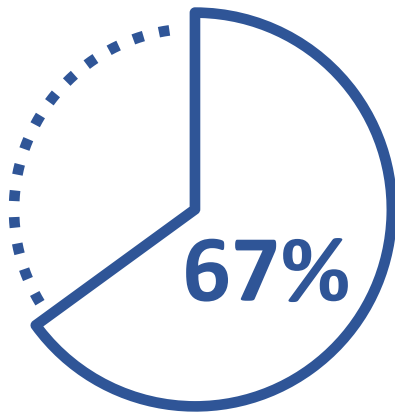
PATIENT VOICES

“The anxiety level did go down tremendously with how she literally explained everything and then talked about – she showed her the speculum, she showed her how it glides in, she showed her – I mean everything.

And even though it seemed like it would take 20 minutes more to do it, it didn't, it was the same amount of time as if she just went in there and plugged it in, shoved it in kind of thing.”

Communication measure: SHEP-6 scale

In the last 12 months, how often did your VA provider seem to know the important information about your medical history?



Explain things in a way that was easy to understand?
Show respect for what you had to say?
Spend enough time with you?
Listen carefully to you?
Give you easy to understand information about your health questions or concerns?

Response options: never, sometimes, usually, or always

➤ *For this analysis, responses were dichotomized as “always” or less than always.*

VA HEALTH SYSTEM STAKEHOLDERS

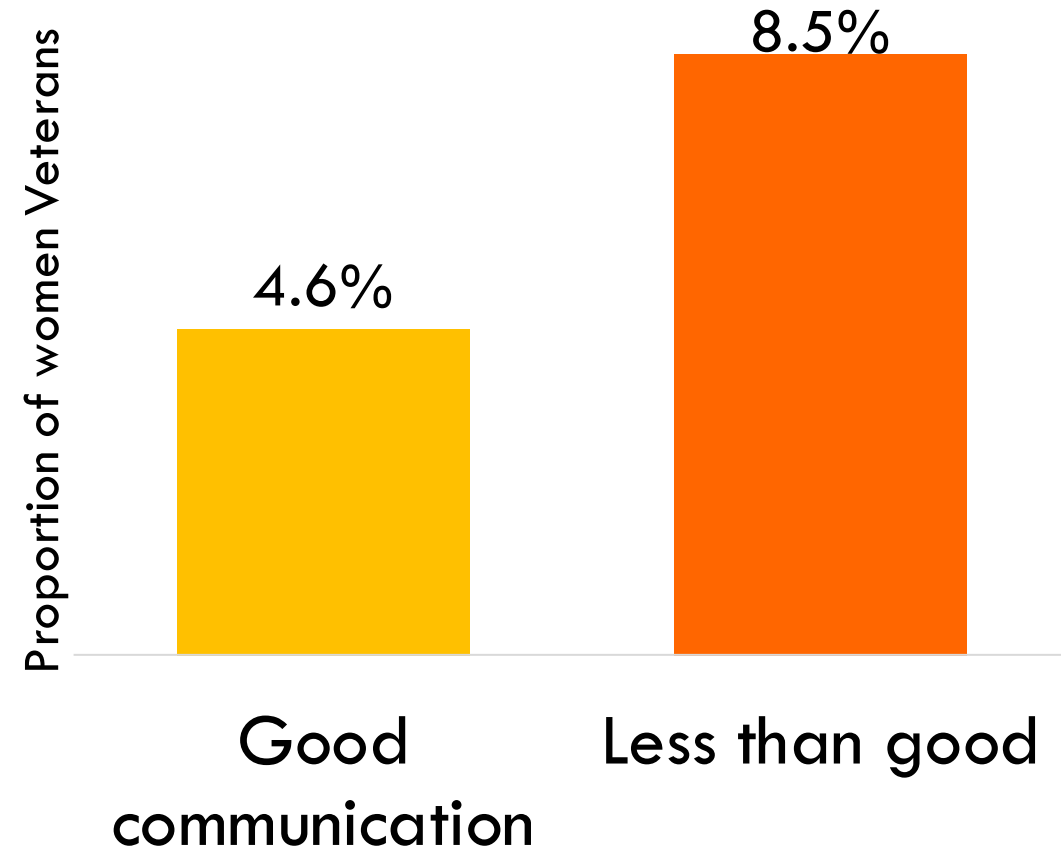
“Making and establishing that level of trust and respect is hard... It is time-consuming and starts with scheduling call: “I give them my direct number to call with questions or concerns and say, “I’m wide open and accessible to you,” . . . they can be time-consuming, and we don’t always have the resources for that, but I think the patients should have that opportunity if they’ve got questions to feel comfortable in asking before, you know, coming to have something like that done.”

-VA Gynecology Nurse

PELVIC EXAM DELAY IN THE PAST 12 MONTHS

Multivariate model adjusting for exam distress and sociodemographics:

aOR **0.7**, 95% CI 0.4, 1.2

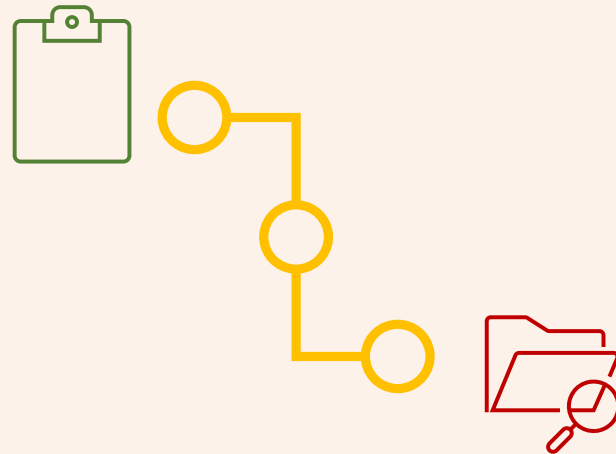


PATIENT VOICES

“I knew it was time to have another Pap and it takes me years to work up the courage to go have one”

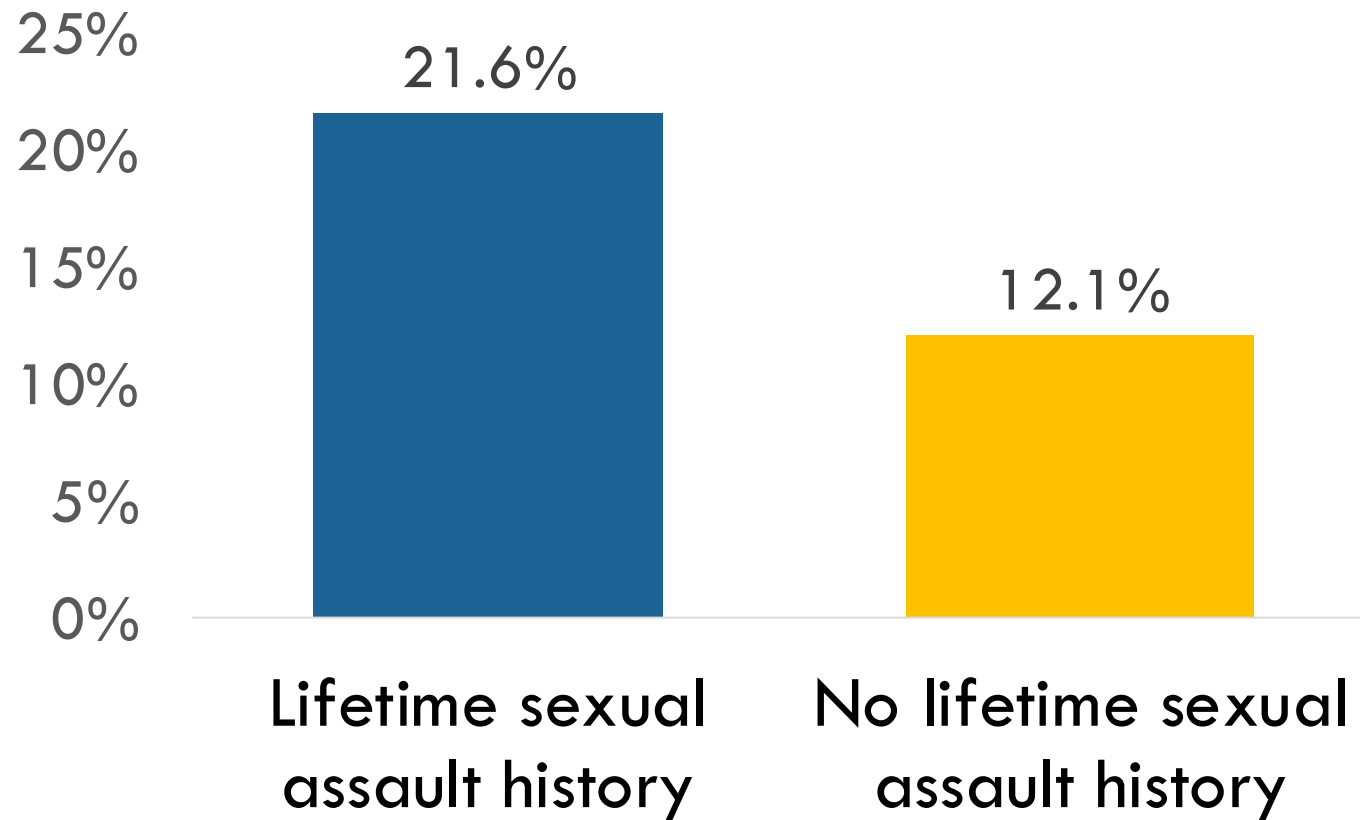
Research Question 3

Among women Veterans who use VA care, is a history of sexual assault associated with cervical cancer screening completion?



EHR documentation
of screening in
the three to five
years prior to
survey completion

PELVIC EXAM DELAY EVER



PATIENT VOICES

“Again, a mental preparation and, you know, just having yourself bound from the panic and you’re freaking out and there’s just trauma of it.”

“I was in the Army so I’m probably gonna say things that are not healthy mentally. Um, you just – you just tell yourself to ball up and get the f**k over it.”

“And you keep telling yourself that and that works until it doesn’t.”

VA EHR Data: Sexual Assault and Pap test completion

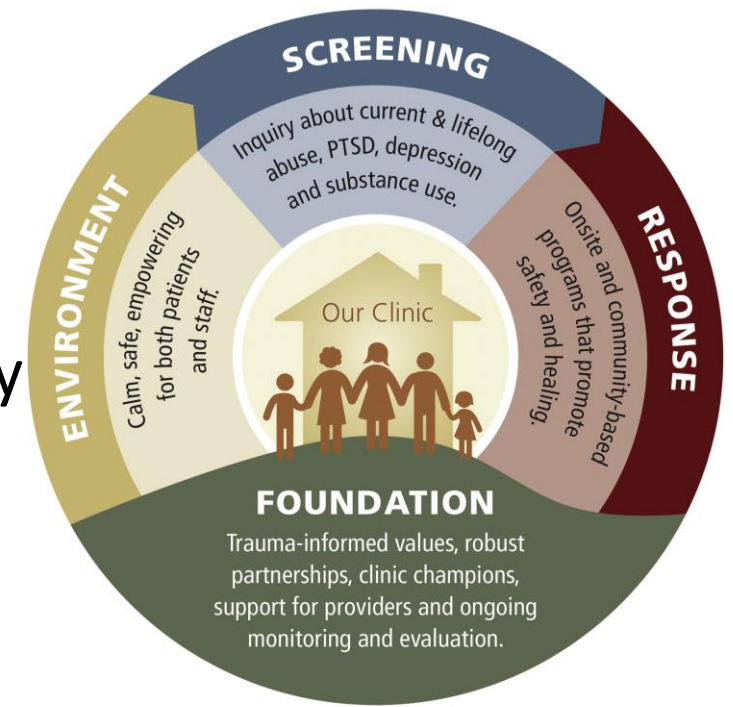
- Nearly all the women had received a Pap test in the past 3-5 years
 - Only 4.5% were not recently screened
- Adjusted odds of Pap test completion were not different for women with or without a history of sexual assault (OR 1.35, 95%CI 0.93, 1.97)
- Similar to prior study: No difference in Pap completion based on Depression or PTSD diagnosis (Weitlauf 2013)



Summary & Conclusions

1. Sexual assault and associated MH conditions are highly prevalent and associated with pelvic exam distress
2. Harassment is associated with pelvic exam delay
3. Good communication reduces delay somewhat
4. Sexual assault is associated with self-reported pelvic exam delay but NOT associated with cervical cancer screening completion

- Patient experience matters
- New testing options may play a role:
 - Self-collected HPV testing

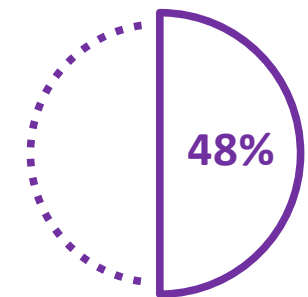


Machtiger, E. L., Cuca, Y. P., Khanna, N., Dawson Rose, C., & Kimberg, L. S. (2015). From Treatment to Healing: The Promise of Trauma-Informed Primary Care. *Women's Health Issues*, 25(3).



System challenges: follow-up of abnormal Pap

- 24% of women in the U.S. with an abnormal screening test result do not receive timely follow-up
- In 2019-2020, VA OIG evaluated for timely follow-up and care coordination requirements
- **Non-compliant** with follow-up requirements:
 - In noncompliant VAs, 24% of patients with abnormal tests did not receive timely results notification



20 of 42 sites

VA HEALTH SYSTEM STAKEHOLDERS

“after the latest round of the ASCCP guidelines have become so convoluted that it’s really difficult to know what to even do for appropriate follow-up and management”

- VA Women’s Clinic Physician

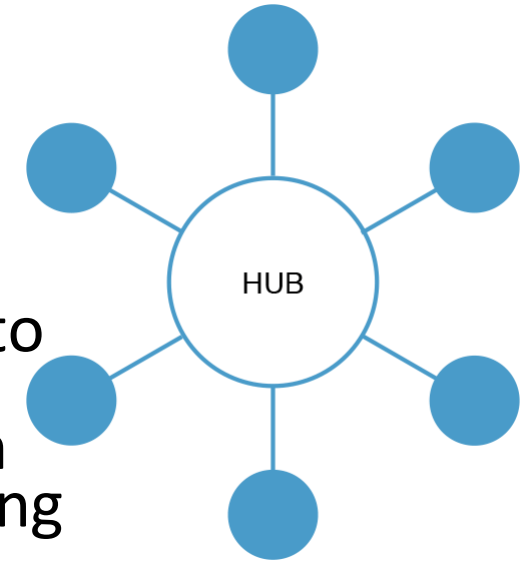
VA HEALTH SYSTEM STAKEHOLDERS

“[We’ve] got to have someone sort of double checking and tracking to make sure that next steps in care are always occurring appropriately”

- National VA leader

Next Steps

- Minneapolis VA received VISN 23 Strategic Initiative funds to create a Pap Hub and Spoke team that will assess cervical cancer risk factors for all women Veterans in the VISN, then review and respond to all abnormal cervical cancer screening tests
- VA HSR&D CDA proposal to address communication of abnormal cervical cancer screening test results
- Dr. Haskell will discuss VA initiatives to improve care coordination for cervical cancer screening



Questions?

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Get Involved!

- ✓ **Subscribe to the VA WHRN Listserv** at https://www.research.va.gov/programs/womens_health/listserv.cfm
- ✓ **Contact** Adriana Rodriguez, Ph.D., WHRN Consortium Program Manager, at Adriana.Rodriguez3@va.gov with ideas for future cyberseminars focused on women's health.

