

VA



U.S. Department
of Veterans Affairs



Identifying Novel Opportunities for Suicide Prevention among Women Veterans using Reproductive Health Care Services

VA HSR&D Pilot Study: HX002526-01A1

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Meet our Team

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Study Website: <https://www.mirecc.va.gov/visn19/research/rhc/>

Disclaimer

This presentation is based on work supported, in part, by the Department of Veterans Affairs, but does not necessarily represent the views of the Department of Veterans Affairs or the United States Government.



Poll Question #1

What is your primary role in VA?

Student, trainee, or fellow

Clinician

Researcher

Administrator, manager or policy-maker

Other



Poll Question #2

Which best describes your familiarity/experience with VA's Suicide Prevention Program & the *National Strategy for Preventing Veteran Suicide*?

Extremely familiar

Very familiar

Somewhat familiar

A little familiar

Not at all familiar



Background & Study Rationale



Women Veterans and Suicide: Epidemiology

2017 Key Data Points



The rate of suicide was

2.2 *times higher*
among female Veterans

compared with non-Veteran adult women.

** after accounting for differences in age*



The rate of suicide was

1.3 *times higher*
among male Veterans

compared with non-Veteran adult men.

** after accounting for differences in age*

From 2005 to 2017, suicide rates:

- Increased 60.5% for Women Veterans
- Increased 42.9% for men Veterans

2019 National Veteran Suicide Prevention Annual Report

https://www.mentalhealth.va.gov/suicide_prevention/data.asp



Women Veterans and Suicide: Legislation

- **Female Veteran Suicide Prevention Act**
- **Signed into Law in June 30, 2016 by President Obama**
- **Mandates that VA identify which mental health care and suicide prevention programs are most effective for women Veterans and which have the highest satisfaction ratings among women Veterans**
 - Effectiveness & preference matter!
 - Programs can and should be tailored to women Veterans unique needs
 - Programs can and should be targeted to best reach women Veterans in need



Women Veterans and Suicide: Research

- **The majority of research to date examining suicide risk among Veterans has been sex and gender neutral**
 - Lower rate of suicide among women in general coupled with low proportion on women in the Veteran population (~10%) makes this a challenging topic to study (small sample sizes)
 - Some limited evidence to date suggests that physical or sexual abuse, family problems, and unhealthy relationships may be more strongly associated with suicide risk (or SI or SA) among women Veterans¹⁻⁶
 - Some mixed findings to date indicating that substance abuse may confer greater risk for women Veterans^{1,7,8}
- **Recognition of the magnitude of this problem has led to growing interest and funding**



The Intersection between Women's Health and Suicide

- **WV of reproductive age (18-44 years) constitute the fastest growing subgroup of Veterans, currently 40% of VHA WV**
- **Particular concern regarding elevated and increasing suicide rates has been noted for younger WV (i.e., 18-39 years of age)**
 - In the U.S., suicide is a major concern for all women of reproductive age
 - Suicide rates rose considerably from 1999 to 2014⁹
 - Suicide is the second leading cause of death for women 15 to 29 years of age, fourth leading cause of death for women 30 to 44 years of age¹⁰
- **Numerous factors may contribute to the high burden of S-SDV among women during their reproductive years**
 - Recognized associations between reproductive changes and events across a woman's lifespan (e.g., puberty, menstrual cycle, childbirth, perimenopause) and negative mental health outcomes



The Intersection between Women's Health and Suicide

- **Mental health conditions are common comorbidities among WV experiencing reproductive events or conditions**
 - Within the VHA: 46% of WV with a reproductive health diagnosis have at least one mental health diagnosis, compared with 37% of those without a reproductive health diagnosis¹¹
 - Co-occurrence of multiple mental health conditions (e.g., PTSD and comorbid depression) is also common¹²⁻¹⁴
 - Mental health conditions commonly affect WV in RHC settings are known risk factors for suicide (e.g., depression, PTSD)
 - Nearly 6% of VA-documented suicide attempts (FY 2009-2012) for VHA-utilizing female Veterans of childbearing age were associated with a pregnancy-related diagnosis¹⁵
 - Sexual dysfunction associated with more severe SI among WV and service members¹⁶

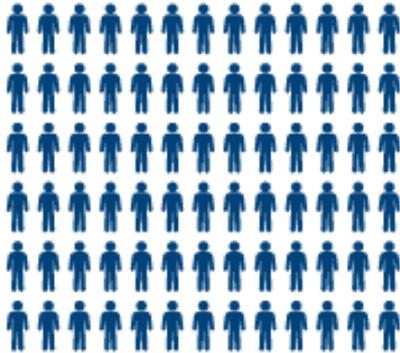


Suicide Prevention in Reproductive Health Care (RHC) Settings

- **Upstream suicide prevention is a critical and effective addition to treating high-risk patients**
 - Research to inform upstream suicide prevention for WV lacking
- **Developing effective upstream suicide prevention programs requires identifying care settings frequented by the population of interest, in which activities could be implemented in a feasible, cost-effective, and acceptable manner.**
 - Among women of reproductive age, RHC is the most frequent reason to obtain medical services
 - Reproductive health conditions are some of the most common diagnoses treated within VHA
 - ACOG recommends:
 - Evaluating suicide risk via depression screening for all adult women at annual Well-Women Exams and during the perinatal period
 - screening and counseling for numerous suicide risk factors beyond depression, such as firearms, substance use, intimate partner violence, sleep disorders, and stress.

National Academy of Medicine Prevention Framework

Figure 4: National Academy of Medicine Classifications of Prevention



Universal (*all*)

Universal prevention strategies are designed to reach the entire Veteran population.



Selective (*some*)

Selective prevention strategies are designed to reach subgroups of the Veteran population that may be at increased risk.

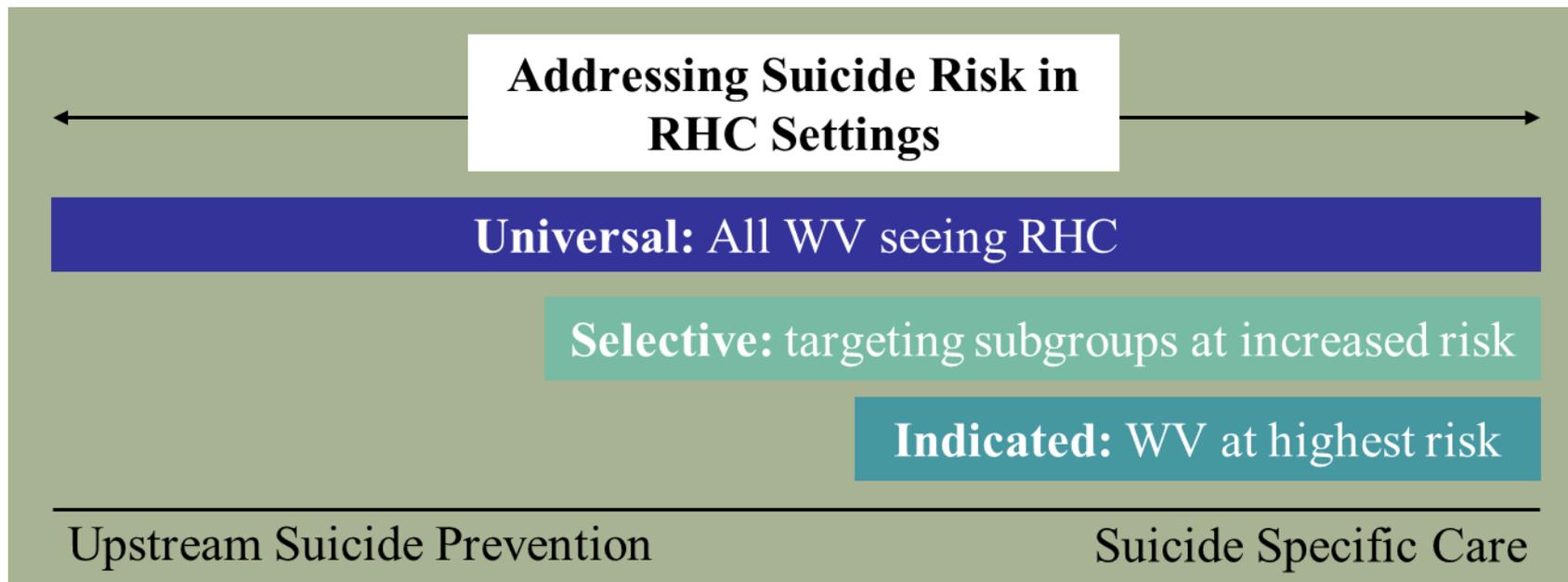


Indicated (*few*)

Indicated prevention strategies are designed to reach individual Veterans identified as having a high risk for suicidal behaviors.



Suicide Prevention Framework in RHC Settings



National Strategy for Preventing Veteran Suicide (2018)

➤ A Public Health Approach to Suicide Prevention (CDC)

The public health perspective asks questions such as: Where does the problem begin? How could we prevent it from occurring in the first place? To answer these questions, VA follows a systematic approach used by the CDC in preventing suicide⁹:



Step 1: Define the problem. This involves collecting data to determine the “who,” “what,” “where,” “when,” and “how” of suicide deaths.



Step 2: Identify risk and protective factors. Scientific research methods are used to explore the factors that increase risk for suicide, as well as the protective factors that serve as buffers against suicide risk.



Step 3: Develop and test prevention strategies. Suicide prevention strategies are developed and tested to see if they succeed in preventing suicide and/or suicidal behaviors.



Step 4: Assure widespread adoption. Strategies shown to be successful in Step 3 are broadly disseminated and implemented by a variety of stakeholders who play a role in preventing Veteran suicide.

Study Aims

Among OEF/OIF/OND Era
Women Veterans (WV) using
RHC services provided or
paid for by VA:

**Define the Problem:
Surveillance**

Primary Aim 1
Estimate rates of
suicide, SI & non fatal
S SDV

**Identify Risk & Protective
Factors:**

Secondary Aim Estimate the
prevalence of S SDV risk factors

Exploratory Aim Estimate
association with suicide risk.

**Public Health
Approach to
Suicide
Prevention**

Implement Interventions:

Results from this and future
studies have the potential to
influence VA policy and
ultimately save lives.

Develop & Test Interventions:

Primary Aim 2 Describe
WVs' beliefs, attitudes, and
preferences regarding suicide
risk assessment and prevention
within RHC settings to guide
integration of upstream suicide
prevention strategies within VA
RHC settings.



Study Design & Methods



Methods

Mixed methods, 3 part study:

1. Secondary data analysis: VHA administrative data

- OEF/OIF/OND era WV who separated between FY10-18
- 18-44 years of age ('reproductive age') at military separation
- Used any health care services provided or paid for by the VA
 - RHC (ever or past year) and non-RHC user cohorts
- Captures information from VADIR & VA EMR on:
 - Demographics, military history
 - RHC services used & RH conditions
 - Mental health conditions
 - Comorbidities: TBI, insomnia, Charlson comorbidity index
- *Status: dataset being finalized, no results presented here*



Methods

Mixed methods, 3 part study:

2. Survey: subset of past year RHC users from Part 1

- RHC services defined broadly and across all care settings
- Mailed survey invitation, completed online or on paper
- **Recruitment sub-study: standard vs. enhanced methods**
- Survey domains:
 - Demographics, military service
 - Health care use, general health status
 - Mental health, reproductive health
 - Family & relationships
 - Self-harm history
 - Access to lethal means
- *Status: data collection & analytic dataset complete*



Methods

Mixed methods, 3 part study:

3. Qualitative interviews: subset of survey respondents

- Survey respondents were asked if they would like to participate in a follow-up, semi-structured telephone interview
- Telephone interviews, single trained interviewer
- Semi-structured interview guide:
 - Experiences with VA RHC
 - Comfort & discomfort with RHC providers
 - Experiences with MH & suicide screening
 - Suicide screening in RHC settings, specifically
- Inductive, thematic analysis framework
 - Three coders, analytic memos, iterative process
- *Status: data collection and analysis complete*



Study Launched 10/1/18 & Closed on 9/30/19!
Data analysis & manuscript preparation underway...





Preliminary Results:
Part 1 Administrative Data Cohort
N = 200,791



Cohort received from VADIR: n = 550,440: WV ≥ 1 separation date between FY10 - FY18

Invalid record in VADIR (n = 339)

- No SSN (n = 278)
- Sex, DOB missing
- Age at begin date or separation < 17
- End date < begin date

n = 550,101: Valid VADIR

Matched on SSN

No match in CDW (n = 219,784)

n = 330,317 : CDW Record

SSN associated with multiple Patient/ICN (n = 2,136)

Sent to SPAN/SDR

n = 328,181: Valid Records in CDW

Most recent not between FY10 and FY18

- Most recent separation before FY 10 (n = 22615)
- Still in military (n = 47679)

n = 257,887: separation FY10-18

Not age 18 – 44 at time of Separation

- Age < 18 at Separation (n = 194)
- Age > 44 at Separation (n = 37,048)

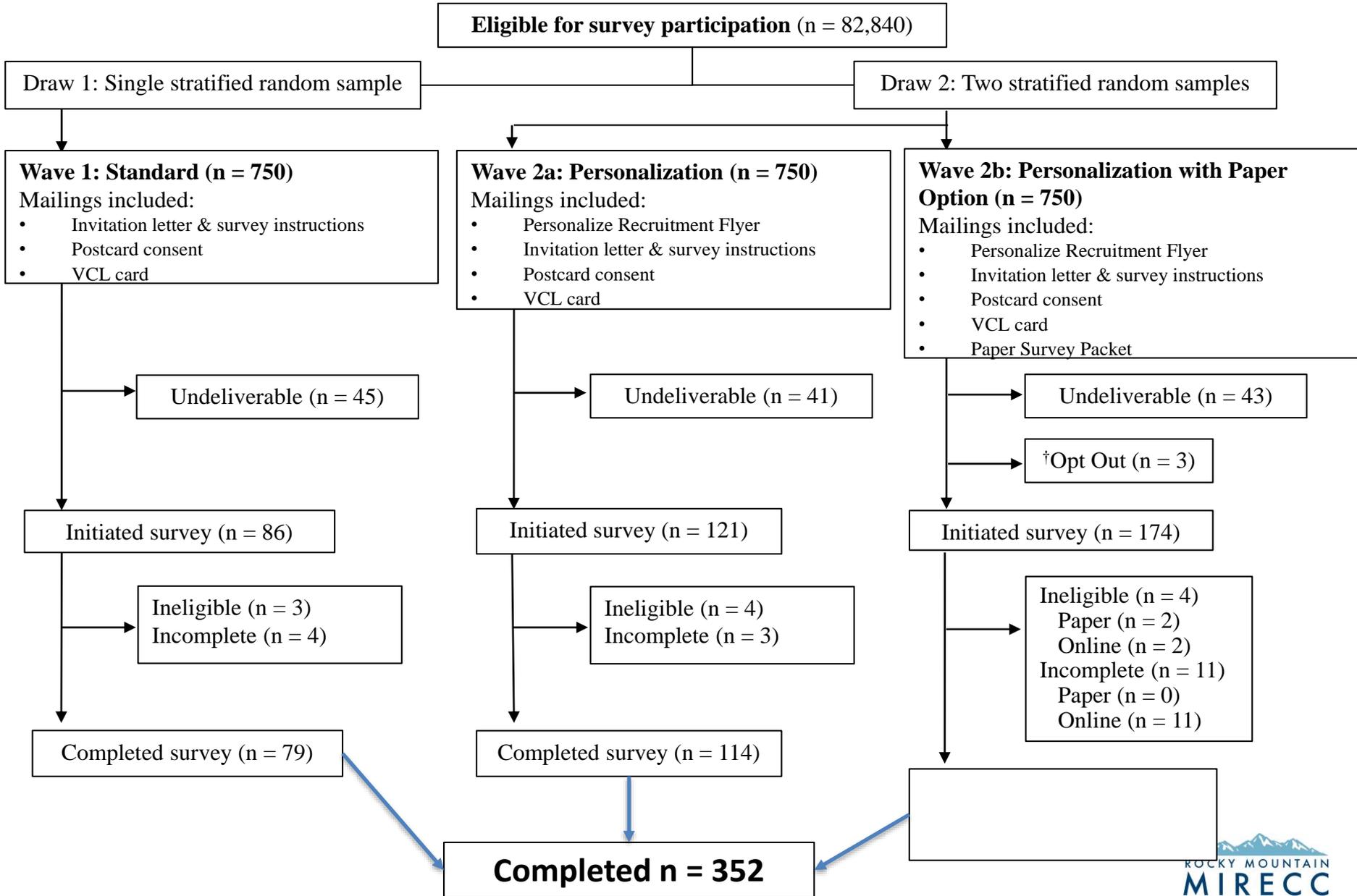
n = 220,645: Age 18 -44 at time of Separation

non-Veterans (n = 19854)

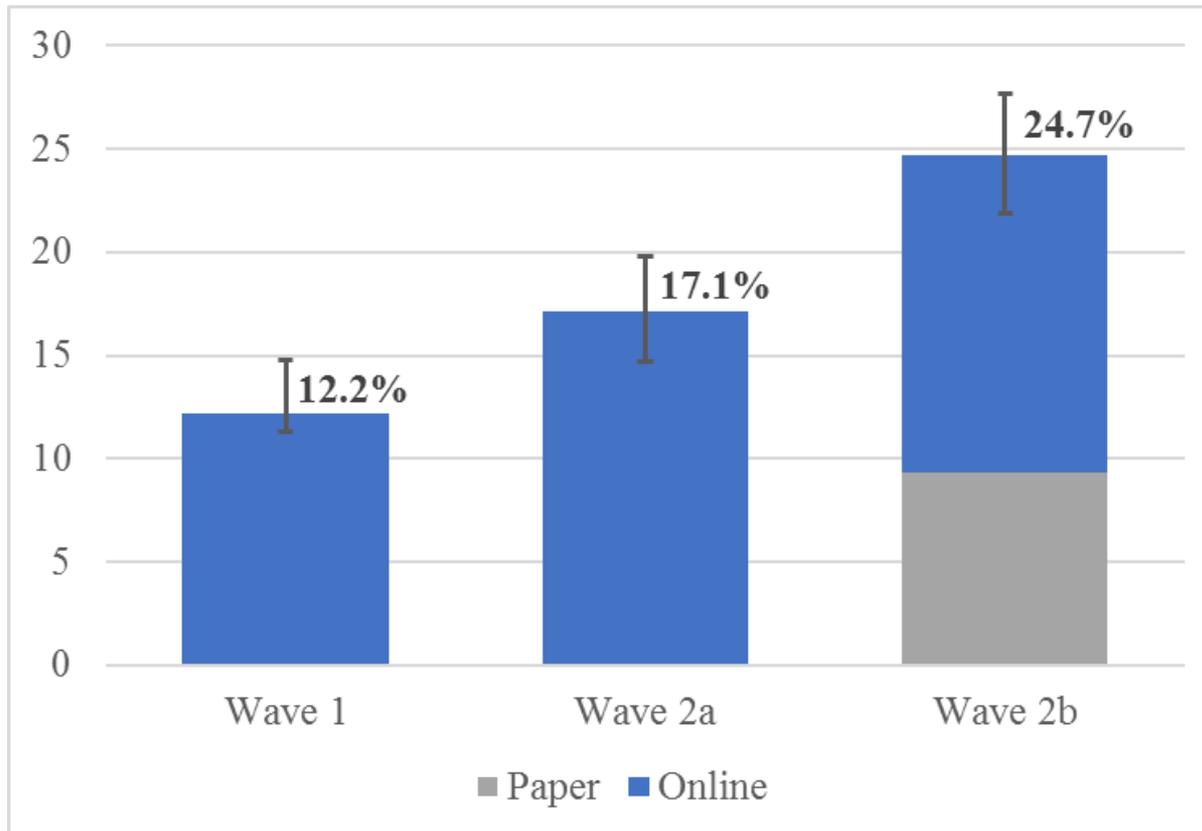
Part 1 Cohort (n = 200,791)



Preliminary Results:
Part 2 Survey Data
n = 352



Survey Response Rates by Wave and Participation Mode



Demographics & Military History	n	%
Age		
18-29	98	28.1
30-39	182	52.1
40+	69	19.8
Race		
Caucasian	233	66.4
African American	55	15.7
Other	63	17.9
Hispanic Ethnicity		
Yes	53	15.1
Sexual Orientation		
Heterosexual	284	80.9
Bisexual	40	11.4
Other	28	7.7
Current Relationship Status		
Married or in a relationship	254	72.4
Not in a relationship	97	2.8

Demographics & Military History	n	%
Employment		
Employed	218	61.9
Unemployed, seeking	49	13.9
Unemployed not seeking, Retired	85	24.1
Last Branch of Service		
Army	164	46.9
Air Force	86	24.6
Navy, Coast Guard	69	19.7
Marines	38	10.9
Deployed during Military Service		
Ever	229	67.0
Military Sexual Trauma		
Harrassment	236	67.2
Assault	149	42.4

Missing data: age (n=3), race (n=1), relationship status (n=1), branch of service (n=2), deployment (n=10), MST harassment (n=1), MST assault (n=1)



Mental Health	n	%
Current MH Problems		
Yes (self-report)	273	77.8
Satisfaction with MH		
Very/Somewhat Dissatisfied	178	50.7
Neither Satisfied nor Dissatisfied	66	18.8
Somewhat/Very Satisfied	107	30.5
Depression (PHQ-8)		
Mild to Moderate	175	50.0
Moderately Severe to Severe	91	26.0
PTSD (PCL-5)		
Provisional Diagnosis	157	44.7
Alcohol Use Problem (AUDIT-C)		
Positive Screen	112	31.9
Drug Use Problem (DAST)		
Positive Screen - low	56	16.0
Positive Screen - moderate/high	19	5.4

Suicidality	n	%
Active Suicide Ideation (C-SSRS)		
Lifetime	148	42.4
Past Month	39	11.2
Suicide Attempt History (C-SSRS)		
Lifetime	82	23.4
Past Year	17	4.9

Missing data: age (n=3), race (n=1), relationship status (n=1), branch of service (n=2), deployment (n=10), MST harassment (n=1), MST assault (n=1), MH problems (n=1), MH satisfaction (n=1), PHQ-8 (n=2), PCL-5 (n=1), AUDIT (n=1), DAST (n=3), SI (n=3), SA (n=3)

- Most women reported using VHA RHC for preventive care, pregnancy and STI screening, contraception
- 60% reported receiving RHC services in primary care, 55% in women's health clinics



Preliminary Results: Part 3 Interview Findings n= 21

Theme 1. Establishing positive patient-provider relationships in RHC settings is important

- **Positive provider behaviors: genuine, caring, compassionate, empathetic, took time to listen, prompt, responsive, personalized care**

“He came in, and he was like, I know you haven’t met me before, and we’re supposed to do your pap smear. But if you’re uncomfortable, we can just meet today and talk and get to know each other”

- **Negative provider behaviors: judgmental, uncaring, unprepared, unresponsive, discomfort/disrespect around birth control choices**

“I would say when I saw my doctor she did kind of, was concerned or kind of a little judging, because I did go see a counselor. And, I don’t know but, that’s the only thing, concern I had. I was like, there should be nothing wrong to get counseling. And so, she kind of thought it was wrong for me to see a counselor.”



Theme 2. Some WV prefer female providers for RHC and suicide risk screening

“...sometimes I feel, you know, a woman doctor understands more womanly stuff than a male doctor.”

“Again, probably male. Because one of the experiences regarding wanting to harm myself or kill myself was male caused. So I would prefer talking to a female...I would tell them [male provider] that I have had them [suicidal thoughts]. But I might not go into detail as much as I would with a female.”



Theme 3. WV's experiences with VA suicide risk screening and assessment vary

- **WV reported frequent suicide screening in various VA settings**
- **Some described these experiences as uncomfortable, stigmatizing & vulnerable**
- **Trust and rapport was particularly important in this context**



Theme 4. Suicide risk screening and prevention in RHC settings: Desired, acceptable, and an unmet opportunity

“I think it's a great idea. There are a lot of women will open up more to their GYN, and so they maybe more apt to. So just, obviously it's a more intimate exam so they may feel more apt to opening up about that. I think any opportunity that someone has to open about mental health issues is another opportunity.”

“I would feel that that was completely within in his purview because of the relationship that we had established prior.”

“I think most mental health providers get it. But also think that like reproductive doctors get more of like the hormonal part and like the chemical part of like emotions. Because it's related, you know, like when you're pregnant you have different hormones, and when you're on your period, you get different hormones. And like, get that part of it. And I find that most therapists don't have like a neuropsychological background. So they're just not as in tuned. And also, most therapists, unless they're a psychiatrist they don't really understand medication as far as like emotions go.”



Conclusions (preliminary)

- **Survey findings suggest a need for integrating suicide prevention with VA RHC**
 - WV using RHC services experience high levels of MH problems and suicidality
- **Qualitative interviews indicate that suicide risk screening and prevention in RHC settings are welcomed by WV**
 - Especially when rapport/trust has been established between the WV and RHC provider



Next Steps/ Future Research

- **Findings presented here are preliminary**
 - Analysis of survey data is ongoing and will be complemented by an analysis of the part 1 administrative dataset. Suicide rates will be computed for this population overall and within RHC service- and diagnosis-defined subgroups.
- **Future research seeking to understand provider perspectives is warranted**
- **Future research aiming to implement upstream suicide prevention initiatives in RHC settings will be driven by findings from this study and the subsequent provider study**



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