



Spotlight on Women's Health Cyberseminar Series

Sponsored by the VA HSR&D Women's Health Research Network

Implementation of a Cardiovascular Toolkit for Women in VA Primary Care

VA EMPOWER QUERI
January 27, 2022



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Overview

- Overview of EMPOWER QUERI
- CV Disease in Women
- CV Toolkit Goals and Processes
- Findings from the CV Toolkit
 - CV Toolkit participant survey
 - Snapshot of women touched by CV template
 - CV Toolkit implementation evaluation
- Next Steps

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Enhancing Mental and Physical Health of Women through Engagement and Retention (QUE 15-272)

Impact Goal: Implement innovative care models in VA women's health, in order to improve women Veterans' engagement and retention in evidence-based care for three high priority health conditions, i.e., prediabetes, cardiovascular risk, and mental health (depression, anxiety)



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Three Component Projects

- Facilitating Cardiovascular Risk Screening and Risk Reduction in Women Veterans (**CV Toolkit**; Bean-Mayberry/Farmer)
- Tailoring VA's Diabetes Prevention Program to Women Veterans' Needs (**DPP**; Moin/Haskell)
- Implementation of Tailored Collaborative Care for Women Veterans (**CCWV**; Hamilton/Lang)



Cardiovascular (CV) Toolkit



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Cardiovascular (CV) Disease & Women

- CV disease is the #1 cause of death for women, causing 1 in 3 deaths each year
- Women have limited understanding of their CV related morbidity and mortality risks
- Women are more likely than men to have certain CV disease risk factors (e.g., higher rates of obesity and inactivity)



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CV Toolkit Goals

- Increase CV risk identification/documentation
- Enhance patient-provider communication about CV risk
- Increase women Veterans' engagement in relevant services and refer to key programs for lifestyle changes



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CV Patient Screener

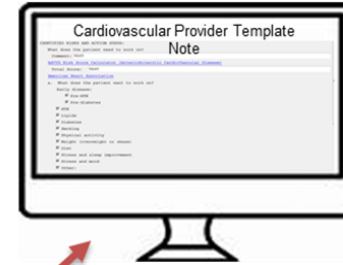
Patient Education/Activation



“What is my CV Risk?”

CV Provider Template

Provider/Patient Communication
Identification and Documentation of CV Risk



CV Toolkit Components

Facilitated Group

Goal Setting and Patient Engagement in Services



Bean-Mayberry B, Moreau J, Hamilton A, Joseph N, Yosef J, Batuman F, Wight SC, Farmer M. Cardiovascular Risk Screening Among Women Veterans: Identifying provider and patient barriers and facilitators to develop clinical management tools. *Women's Health Issues* (in press).



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REP and the CV Toolkit



IDENTIFY



DEVELOP



MAINTAIN AND EVOLVE

- PRE-CONDITIONS**
- Identify needs, effective interventions, and implementation barriers
 - Fit local settings and stakeholder priorities
 - Draft package



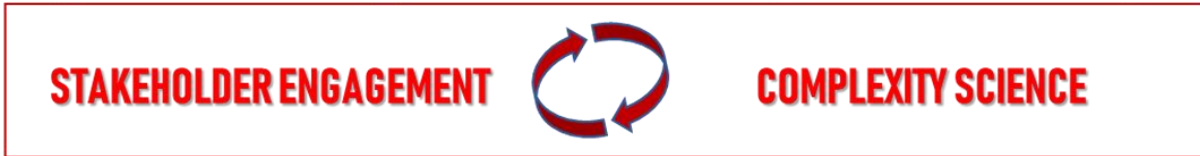
- PRE-IMPLEMENTATION**
- Develop package (manual, training curriculum, etc.)
 - Pilot test package
 - Identify program champion
 - Hold orientation meetings



- IMPLEMENTATION**
- Train staff
 - Provide technical assistance
 - Evaluate
 - Measure fidelity and outcomes
 - Share results
 - Discuss sustainability



- MAINTENANCE & EVOLUTION**
- Facilitate long-term adoption
 - Focus on dissemination and spread
 - Re-customize delivery as needed
 - Develop playbooks



*Adapted from Kilbourne et al., 2007

Hamilton et al., 2017. *Implementation Science*, 12(1), pp.1-12.



CV Toolkit Project Aims

- Refine elements of the CV Toolkit
- Implement the CV Toolkit
 - 5 VA facilities over 4 years
 - 18-month follow up
- Evaluate CV Toolkit
 - Patient participant survey
 - Template data
 - Non-randomized stepped wedge design



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CV Toolkit Reach

- Over 1600 women Veterans were touched by CV Toolkit and had some discussion of CV risk with their care team
- 76 women participated in gender-tailored Gateway to Healthy Living facilitated group to provide CV goal-setting
- 24 women participated in a newly developed and piloted telephone-based Gateway program at 1 site



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CV Toolkit Women Veteran Survey



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CV Toolkit Women Veteran Survey

- Survey mailed to women who received at least one component of the CV Toolkit
- 253 women Veterans participated
- Survey contents
 - Demographics and Health Risks
 - Health Behaviors and VA Experiences
 - CV Knowledge



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Women Veteran Survey (N=253)

Patient Characteristics	Percentages
Age (years), mean, SD, R 26-98	59 \pm 12.1
Race	-
- White	63%
- Black	27%
- Asian	4%
- American Indian/Native American	4%
Ethnicity/Hispanic	13%
LGBT/Other sexual orientation	13%
Some college, associate or bachelor's degree	60%
Service-connected disability	67%
Income <\$30,000	26%

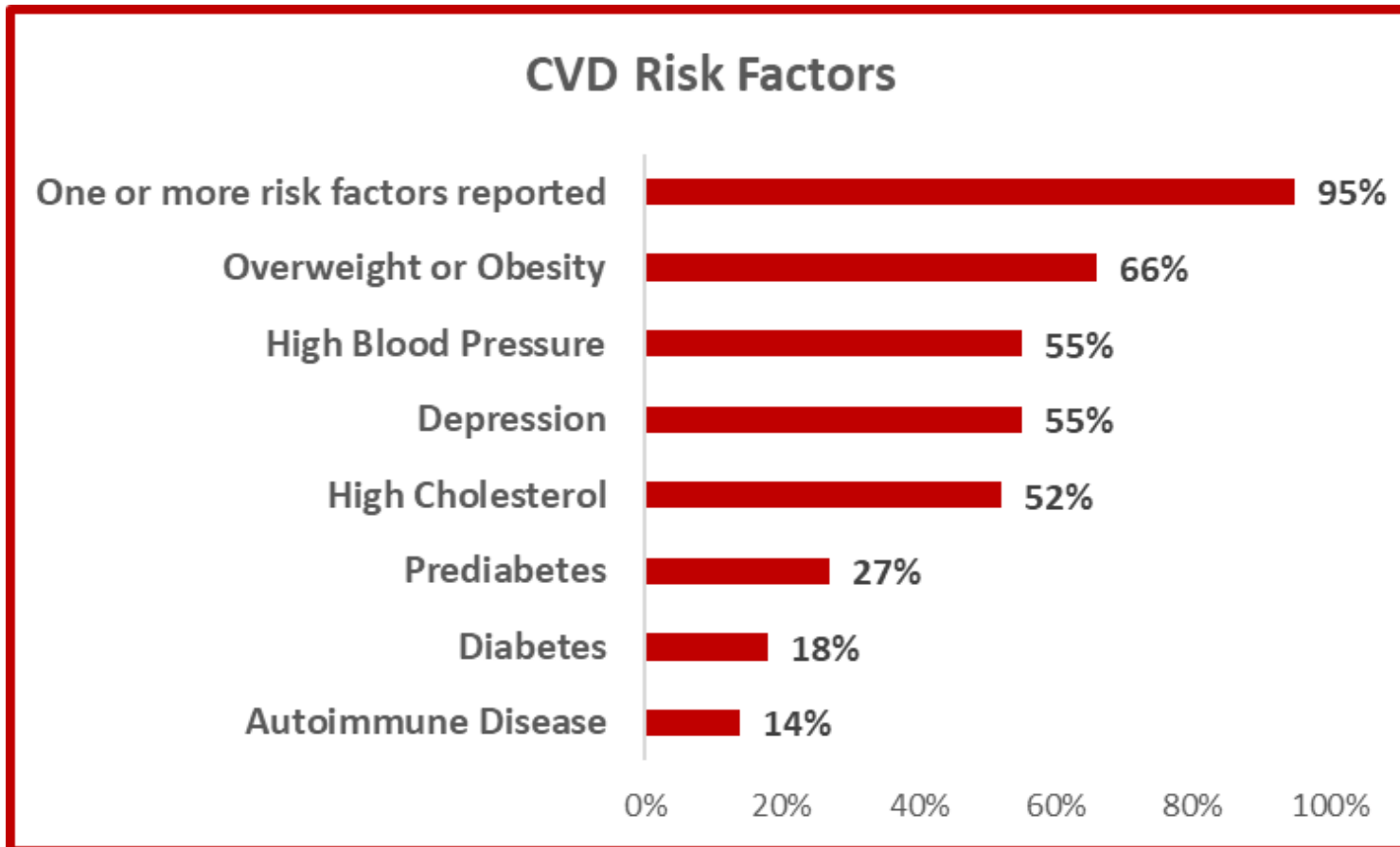


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Women Veteran Survey (N=253)



95% had
1 Risk!

59% had
3+ Risk!

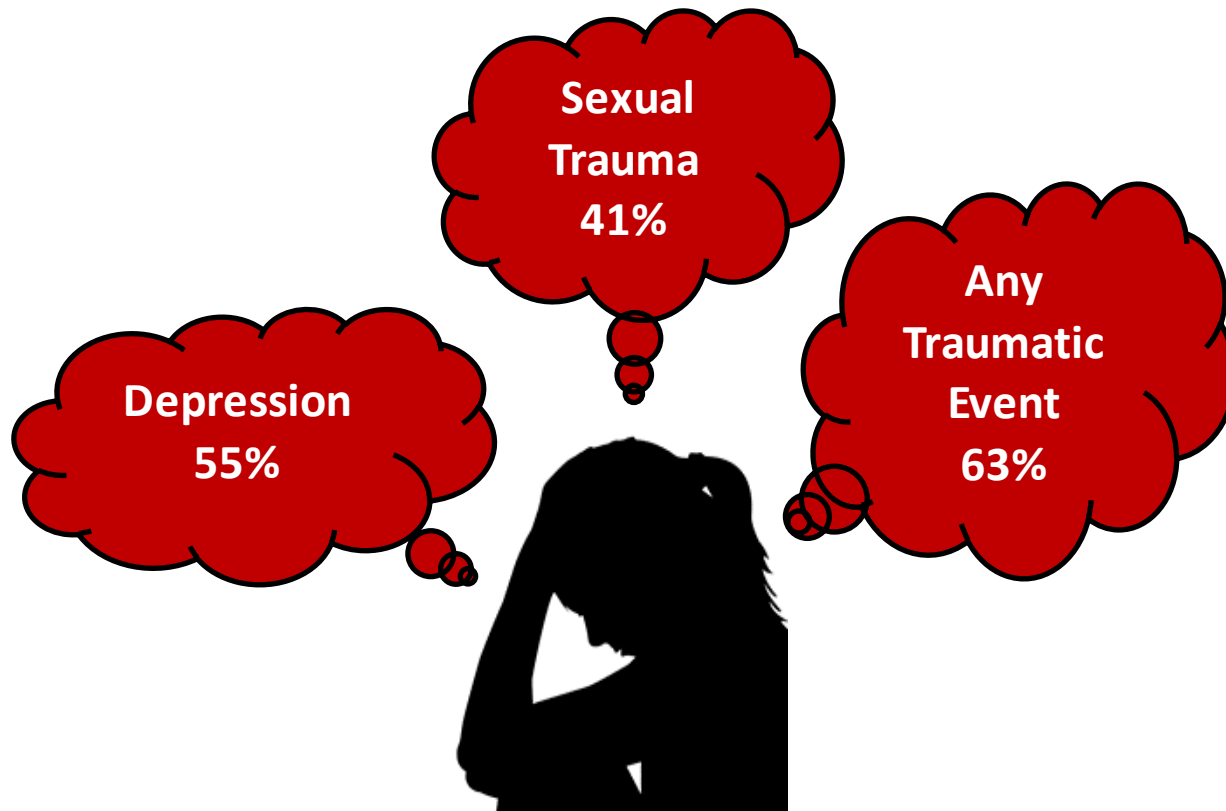


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Women Veteran Survey: Mental Health & Trauma (N=253)



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Women Veteran Survey: Health Behaviors & VA Experiences (N=253)

Survey Question	Percentages
In past 6 months, did you make any behavior goal with your provider, yes	53%
Confident you can make behavior change, 8-10	24%
Average # days exercising Average # minutes exercising	2 days, SD 2.2 32 minutes, SD 41
Trust in VA provider rated high, 9-10	64%
Your provider shows respect for what you say, always/usually	88%



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Women Veteran Survey (N=253)

Heart Disease Knowledge

Heart disease is the leading cause of death	70%
Identify symptoms of a heart attack	
Pain/discomfort in jaw, neck or back	66%
Feeling weak, lightheaded or faint	79%
Chest pain or discomfort	96%
Pain/discomfort in arms or shoulder	92%
Shortness of breath	90%
Identified all 5 heart attack symptoms	66%
Call 911 if you think someone was having a heart attack	93%

70%
compared to
55% in
national
sample*

66%
compared to
50% in
national
sample**

*Mosca 2006; **Fang 2019



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CV Template Completion



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CV Patient Screener

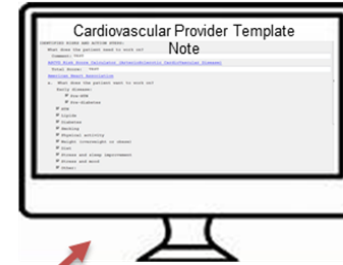
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CV Toolkit Template Use

- Cohort of 6009 women Veterans (12/16-3/20)
- 1656 unique patients received a template
 - Range by site 153-897
- Two-part template
 - 1493 part 1 (CV risk screening)
 - 1055 part 2 (CV action step and referral)
 - 892 have both



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CV Template Completion

- Used administrative data (CDW) to examine template completion
- Included demographic and clinical factors
 - Age, race/ethnicity, utilization of primary care & mental health, CV risk factors, mental health
- Multiple logistic regression adjusting for clustering within sites
- Examined referrals on completed templates



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Cohort of Women Veterans (N=6009[^])

Template Completed	No	Yes
N	4400 (73.2%)	1609 (28%)
Age, x (years)	45.0	49.3**
White race	35%	46%**
Black race	31%	30%
Hispanic	18%	14%
Married	27%	30%**
Primary care visits, median	1.0	3.0**
Mental health visits, median	0.0	1.0**
Overweight	30%	29%
Obese	35%	44%**
Diabetes	10%	15%**
Hyperlipidemia	27%	37%**
Hypertension	23%	34%**
Depression	41%	44%
PTSD	33%	30%*
At least 1 of 3 CV risks	37%	51%**

[^]N varies with missing data. *p<.05, **p<.01.

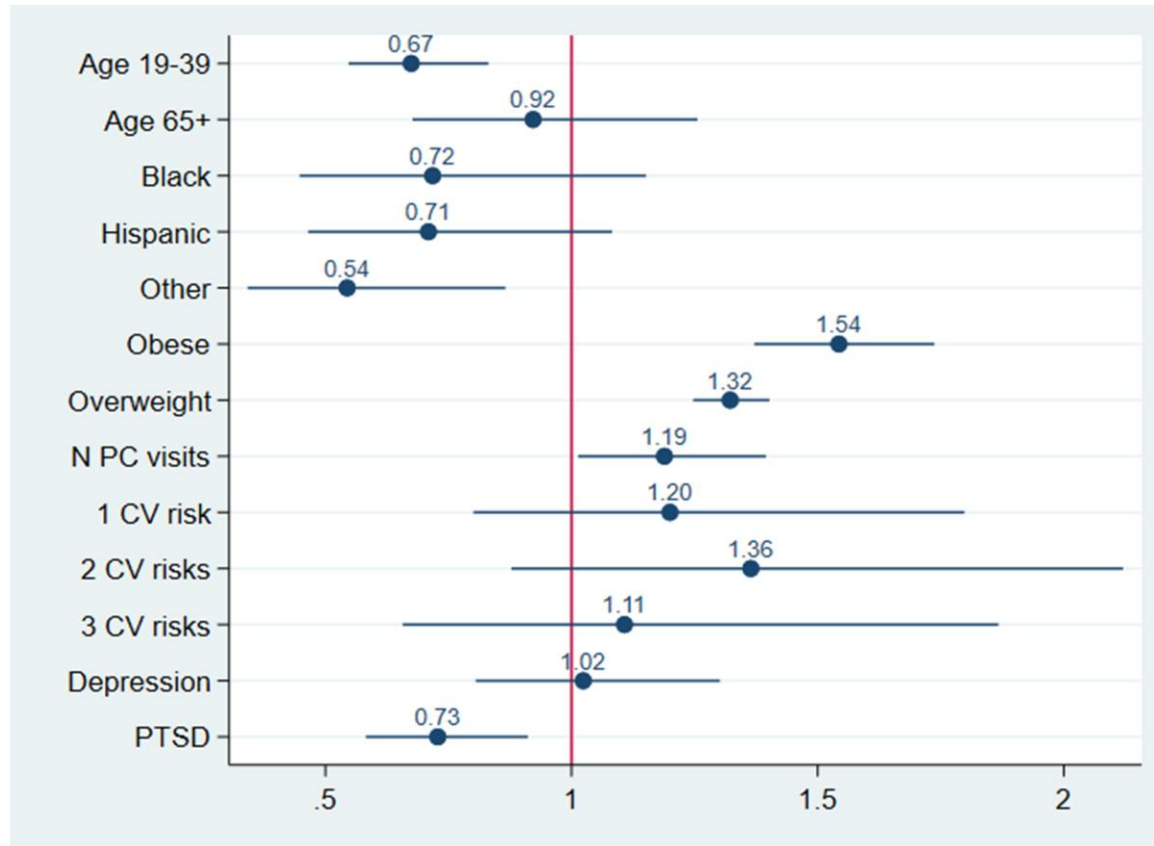


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Logistic Regression Modeling Template Completion (N=6009)

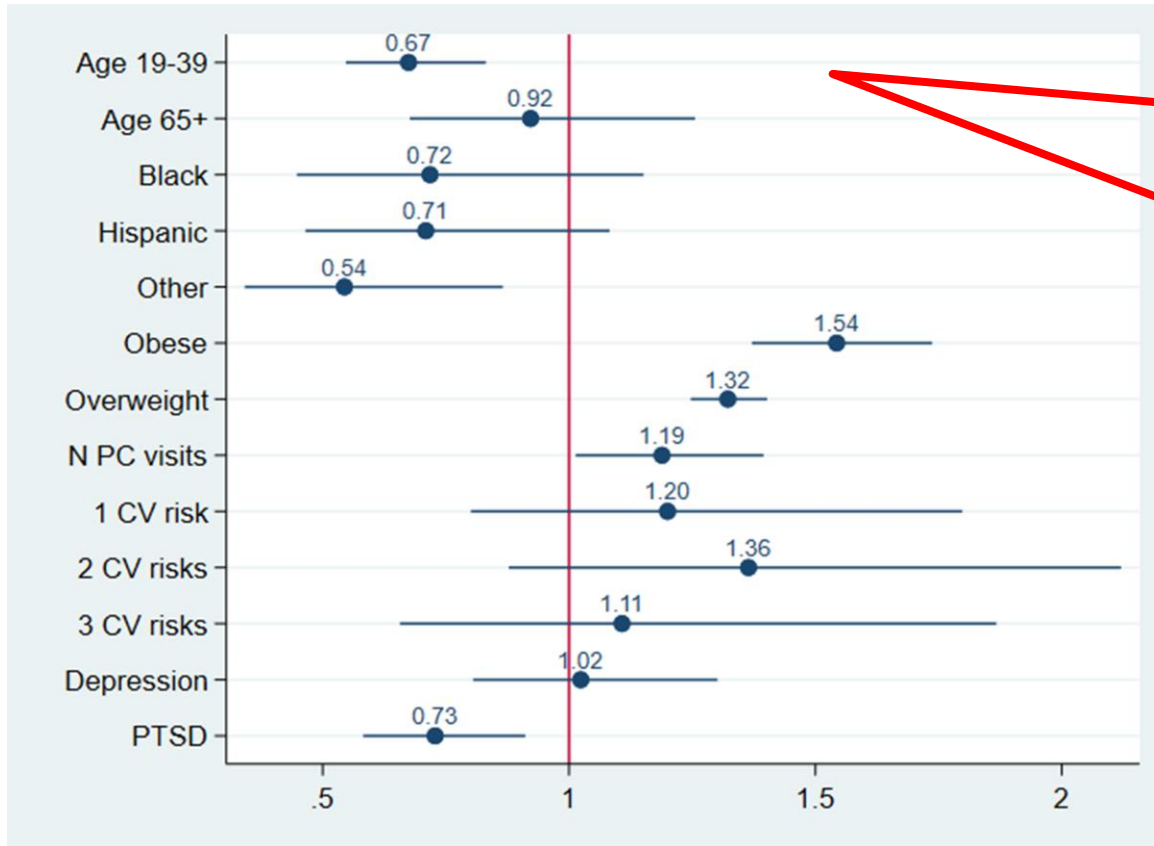


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Logistic Regression Modeling Template Completion (N=6009)



Younger women had decreased odds of receiving the template

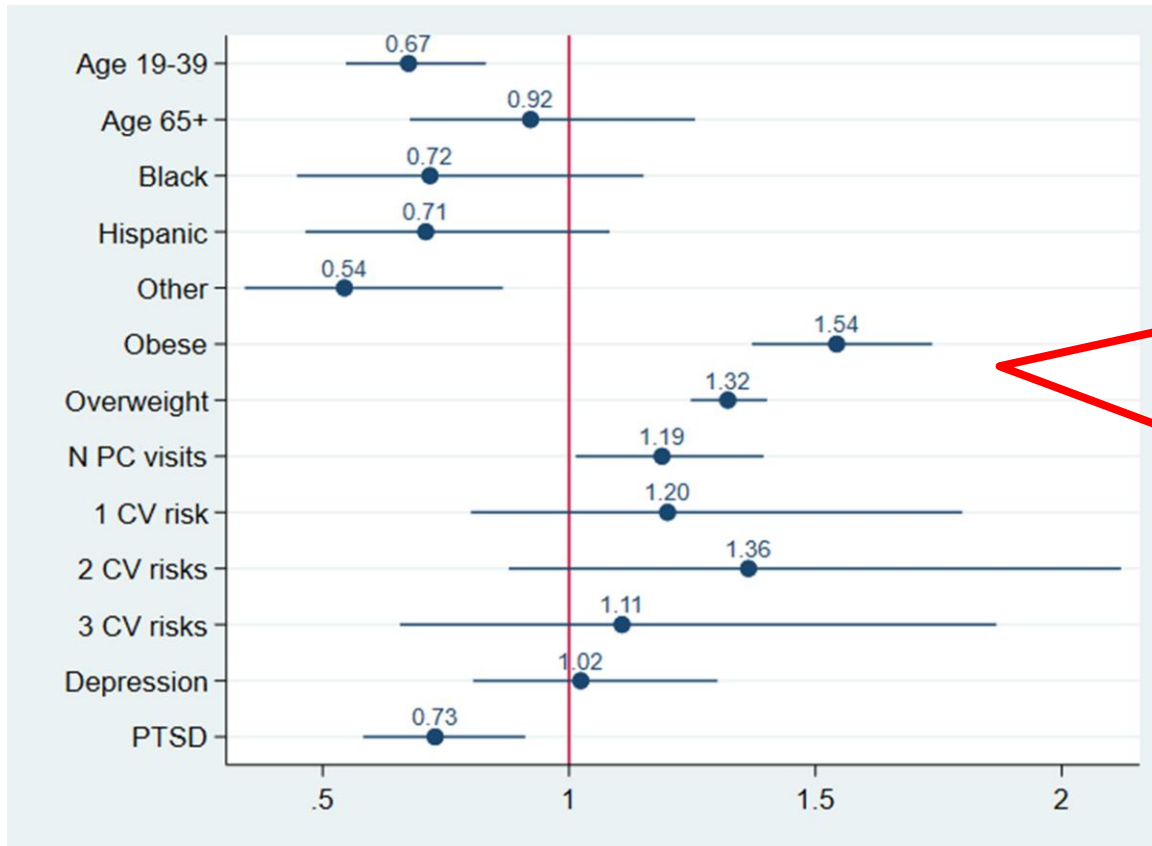


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Logistic Regression Modeling Template Completion (N=6009)



Women who were obese or overweight had increased odds of receiving the template

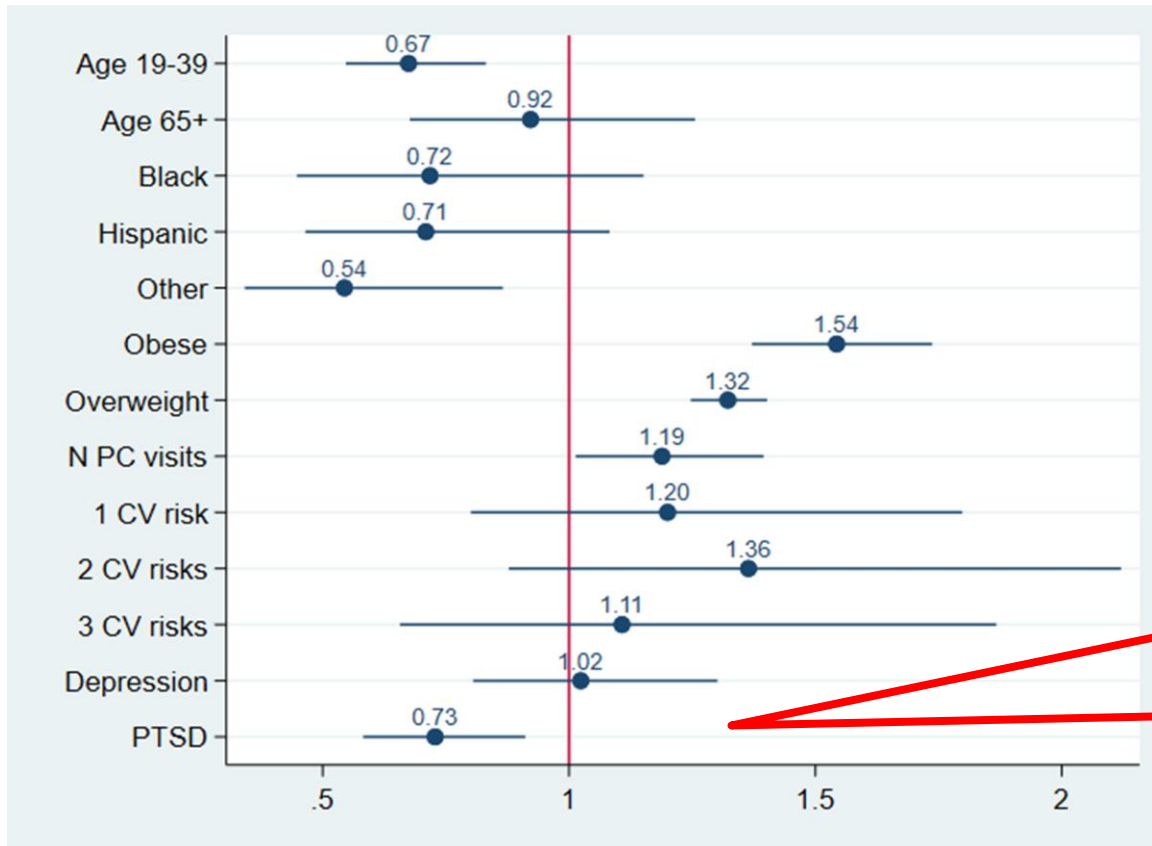


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Logistic Regression Modeling Template Completion (N=6009)



PTSD decreased the odds of receiving the template



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Referrals for Women with Template

72% of women with template had a referral



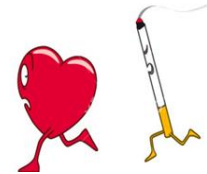
27% CV goal setting group

11% Mental health consult



26% Exercise program

3% Smoking cessation



18% Dietitian

43% Other



Evaluation of CV Toolkit Implementation



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Implementation Setting

- 5 geographically diverse VA primary care sites
- Period: Dec 2016-March 2020
- Duration across sites: 11-29 months
 - COVID-19



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Population & Data

- Evaluation includes all women with at least one primary care visit during the study period
 - n=6009 patients
 - 96% Veterans
- Data Source: VA CDW



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Evaluation

- Primary Outcomes: Patient participation in VA health promotion programs that target reducing CV risk
 - MOVE!
 - Other programs
 - Health promotion and disease prevention (HPDP) programs (coaching, facilitated groups, etc.)
 - Complementary integrative health (CIH) (yoga, Tai Chi, meditation, etc.)
- Non-randomized stepped wedge models at site level
- Stratified by age (65 and older; younger than 65)



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Population Characteristics at Implementation Sites (N=6009)

Patient Characteristics	Women <65 years old	Women ≥65 years old
	N=5,469	N=540
Mean Age	43	72
Race/Ethnicity: White	35%	54%
Black	31%	25%
Hispanic	18%	7%
American Indian	1%	1%
Asian	4%	1%
Native Hawaiian	1%	1%
Site Level		
% of women seen in WH clinic	82%	76%
(versus PC Clinic)		



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Odds of Participation When CV Toolkit Was Active (stratified by age)

	Odds Ratio	Confidence Interval
<u>MOVE! Exercise Program</u>		
Age 65+	1.09	(1.030-1.152)
< 65 years	1.00	(0.976-1.022)

Odds of Participation When CV Toolkit Was Active (stratified by age)

	Odds Ratio	Confidence Interval
<u>MOVE! Exercise Program</u>		
Age 65+	1.09	(1.030-1.152)
< 65 years	1.00	(0.976-1.022)

In sites with the CV Toolkit active:

- ♥ Women 65 years and older had greater odds of participating in MOVE! programs



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Odds of Participation When CV Toolkit Was Active (stratified by age)

Odds Ratio Confidence Interval

Other VA programs

Age 65+	1.06	(0.959-1.165)
< 65 years	1.01	(1.002-1.022)



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Odds of Participation When CV Toolkit Was Active (stratified by age)

	Odds Ratio	Confidence Interval
<u>Other VA programs</u>		
Age 65+	1.06	(0.959-1.165)
< 65 years	1.01	(1.002-1.022)

In sites with the CV Toolkit active:

- ♥ Women less than 65 years old had greater odds of participating in HPDP and/or CIH programs



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Conclusions & Implications

- The CV Toolkit intervention was effective in increasing women Veterans' participation in behavior change programs
- Variety in VA programs may be key to supporting CV targeted behavior change for women across the age spectrum
- Additional work is ongoing to understand uptake, adaptations, and sustainment of the CV Toolkit



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Limitations

- Analytical sample was limited to the number of sites (n=5)
- Implementation ended early at two sites due to COVID-19



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CV Toolkit Lessons

- Systematic CV risk screening and goal setting requires time and support
- Facilitated groups are hard to recruit and maintain
- Nearly all women have CV risks
 - But not all have considered a change
 - Yet some are ready to make a change



All women need support for any health behavior change!



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Next Steps: EMPOWER 2.0

VA EMPOWER QUERI 2.0 (Hamilton, Bean-Mayberry, Farmer, Moin)

- Implementation of 3 evidence-based practices for women Veterans using virtual care/telehealth modalities at 20 sites
 - VA Telephone Lifestyle Coaching* (TLC) - 10 sites
 - Virtual Diabetes Prevention Program (DPP) - 10 sites
 - Reach Out, stay Strong Essentials (ROSE) for pregnant women across the 20 sites
- Sites are randomized to either of 2 implementation strategies (EBQI or REP) to roll out practices.

*TLC is supported via VA National Center for Health Promotion and Disease Prevention



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QUE 20-028



CV Toolkit Team

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THANK YOU, EVERYONE!



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Thank You

- Bevanne Bean-Mayberry, MD, MHS, Bevanne.Bean-Mayberry@va.gov
- Melissa M. Farmer, PhD, Melissa.Farmer@va.gov
- Funding: VA QUERI EMPOWER QUERI 15-272

– In heartfelt memory of Dr. Jacqueline Satchell,
VA Connecticut WH Medical Director



- Women's Health Research Network & Practice Based Research Network
- VA Connecticut Healthcare System
- VA Greater Los Angeles Healthcare System
- VA South Texas Healthcare System
- National Center for Health Promotion and Disease Prevention
- Women's Health Medical Directors & Women Veteran Program Managers
- Women's Health and Primary Care PACT Teams
- Local Clinical Application Coordinators



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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.
- ✓ **Join** the CV Risk Reduction Workgroup in VA WHRN. Email Karen.Goldstein@va.gov and Bevanne.Bean-Mayberry@va.gov.

