

The logo features a large yellow circle on the left. The text "VA WOMEN'S HEALTH RESEARCH NETWORK" is written in blue, serif, all-caps font across the top and middle of the circle. Below the circle, a dark grey horizontal bar contains the text "Supporting Practice and Research Collaboration" in white, sans-serif font.

**VA WOMEN'S HEALTH  
RESEARCH NETWORK**

Supporting Practice and Research Collaboration

***Spotlight on Women's Health Cyberseminar Series***

**An Evidence Map of the Women Veterans' Health Literature  
(2016-2023)**

Sponsored by the VA Women's Health Research Network

[WHRN@va.gov](mailto:WHRN@va.gov)

# Today's Speakers



**Rachel Pace, MD**

Staff Physician;  
Investigator Durham Center of Innovation to  
Accelerate Discovery and  
Practice Transformation (ADAPT);  
Medical Instructor, Duke University Division of  
General Internal Medicine



**Karen Goldstein, MD, MSPH**

Staff Physician; Core Investigator Durham Center of  
Innovation to Accelerate Discovery and Practice  
Transformation (ADAPT);  
Co-director, Durham VA Evidence Synthesis Program;  
Associate Professor of Medicine, Duke University  
Division of General Internal Medicine



# Today's Discussant

**Elizabeth M. Yano, PhD, MSPH**

**Director**, VA HSR Center for the Study of Healthcare Innovation, Implementation & Policy, VA Greater LA Healthcare System

**Director**, VA Women's Health Research Network (WHRN) Consortium

**Professor** of Medicine at the UCLA Geffen School of Medicine and Professor of Health Policy & Management at the UCLA Fielding School of Public Health

# ESP

## VA Evidence Synthesis Program

*Synthesizing evidence for VA leadership to improve the health and health care of Veterans*

**Rachel Pace, MD**

*Core Investigator, Durham ADAPT*

**Karen M. Goldstein, MD, MSPH**

*Co-Director, Durham ESP Center*



# What is the ESP?

# ESP

## **Nimble**

*We adapt traditional methods, timelines, and formats to meet our partners' specific needs.*

## **Rigorous**

*Rigor, transparency, and minimization of bias underlie all our products.*

## **Relevant**

*Emphasis on Veteran population helps ensure our reviews are relevant to VA decision-makers' needs.*

The VA **Evidence Synthesis Program (ESP)**, established in 2007, helps VA fulfill its vision of functioning as a continuously learning health care system. We provide timely, targeted, independent syntheses of the medical literature for the VHA to translate into evidence-based clinical practice, policy, and research.

**VA**



**U.S. Department of Veterans Affairs**

Veterans Health Administration  
Health Systems Research

# What is the ESP?

# ESP

- **ESP reports are used to help**
  - Develop clinical policies informed by evidence
  - Implement effective services and support VA clinical practice guidelines and performance measures
  - Set the direction for future research to address gaps in clinical knowledge
- **Four ESP Centers across the US**
  - Directors are VA clinicians and recognized leaders in the field of evidence synthesis, and have close ties to the AHRQ Evidence-based Practice Center Program
- **ESP Coordinating Center in Portland**
  - Manages national program operations, ensures methodological consistency and quality of products, and interfaces with stakeholders
  - Produces rapid products to inform more urgent policy and program decisions
- To ensure responsiveness to the needs of decision-makers, the program is governed by a Steering Committee composed of health system leadership and researchers

*The ESP accepts [topic nominations](#) throughout the year, and nominations are considered every 4 months.*

**VA**



**U.S. Department of Veterans Affairs**

Veterans Health Administration  
Health Systems Research

This presentation was prepared by the Evidence Synthesis Program Coordinating Center located at the Durham VA Health Care System directed by Alyshia Smith, DNP, MS and funded by the Department of Veterans Affairs, Veterans Health Administration, Health Services Research and Development.

The findings and conclusions in this document are those of the author(s) who are responsible for its contents and do not necessarily represent the views of the Department of Veterans Affairs or the United States government. Therefore, no statement in this presentation should be construed as an official position of the Department of Veterans Affairs. No investigators have any affiliations or financial involvement (eg, employment, consultancies, honoraria, stock ownership or options, expert testimony, grants or patents received or pending, or royalties) that conflict with material presented.



**U.S. Department of Veterans Affairs**

Veterans Health Administration  
Health Systems Research

The ESP consulted several technical and content experts in designing the research questions and review methodology. In seeking broad expertise and perspectives, divergent and conflicting opinions are common and perceived as healthy scientific discourse that results in a thoughtful, relevant systematic review. Ultimately, however, research questions, design, methodologic approaches, and/or conclusions of the review may not necessarily represent the views of individual technical and content experts. The authors gratefully acknowledge the following individuals for their contributions to this project:

## Operational Partners

Operational partners are system-level stakeholders who help ensure relevance of the review topic to the VA, contribute to the development of and approve final project scope and timeframe for completion, nominate technical expert panel members, provide feedback on the draft report, and provide consultation on strategies for dissemination of the report to the field and relevant groups.

Sally Haskell, MD, MS, VA Office of Women's Health



**U.S. Department of Veterans Affairs**

Veterans Health Administration  
Health Systems Research



## Technical Expert Panel (TEP)

To ensure robust, scientifically relevant work, the TEP guides topic refinement; provides input on key questions and eligibility criteria, advising on substantive issues or possibly overlooked areas of research; assures VA relevance; and provides feedback on work in progress.

Elizabeth Yano, PhD

Adriana Rodriguez, PhD

Lori Bastian, MD, MPH

Amanda Borsky, DrPH, MPP

Alison Hamilton, PhD, MPH

Jodie Katon, PhD, MS

Bevanne Bean-Mayberry, MD

Dawne Vogt, PhD



**U.S. Department of Veterans Affairs**

Veterans Health Administration  
Health Systems Research

## *An Evidence Map of the Women Veterans' Health Literature (2016 – 2023)*

August 2024

*Full-length report available now*

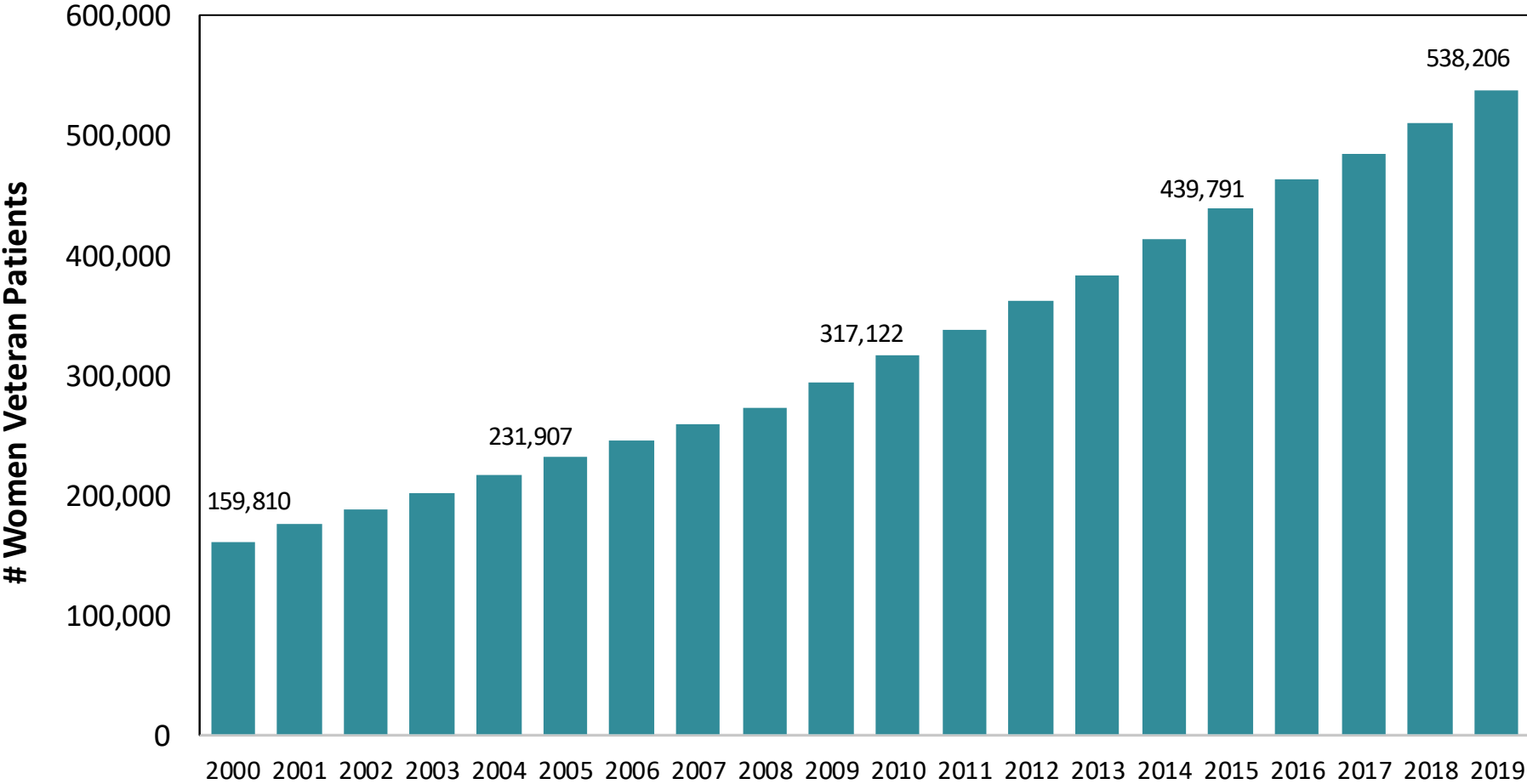
**VA**



**U.S. Department of Veterans Affairs**

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Health Systems Research

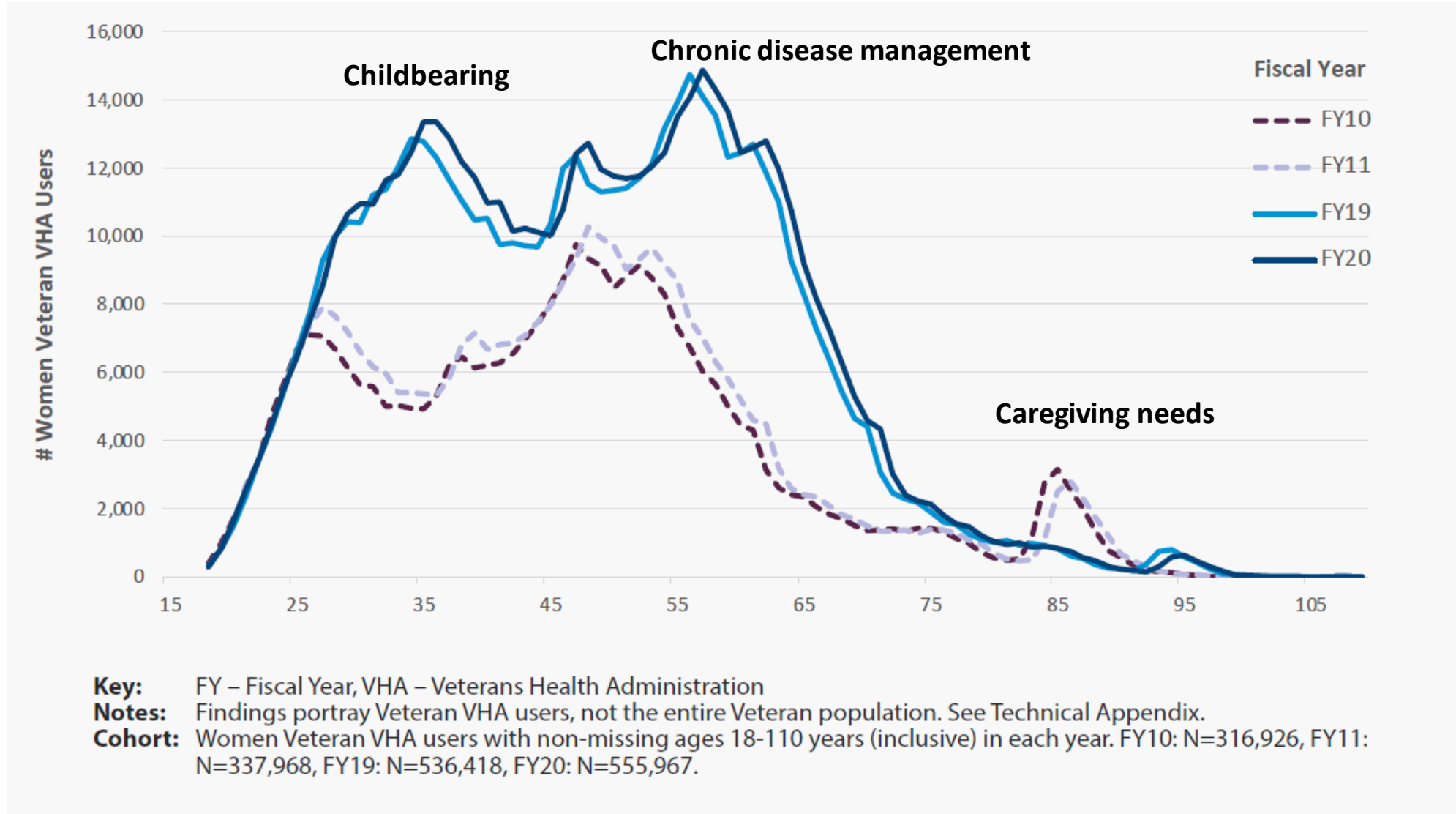
# Number of Women Veteran VHA Patients in Each Year, FY00-FY19



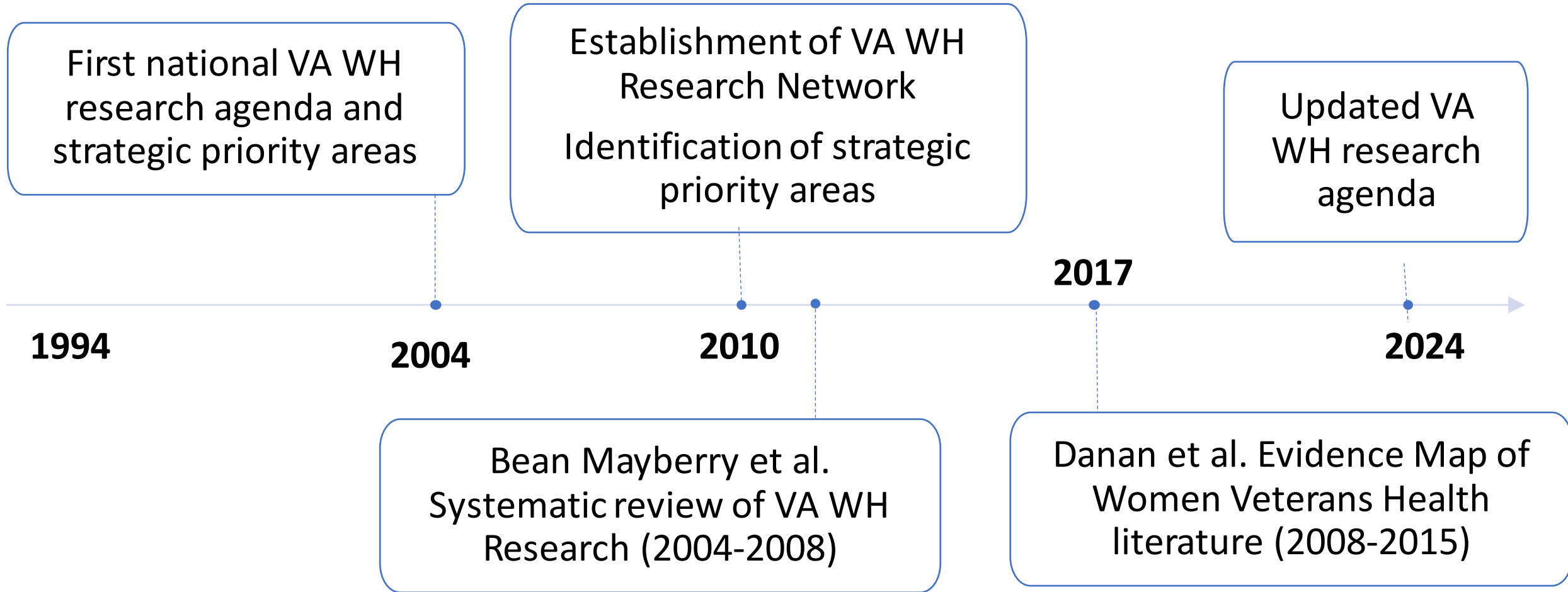
**237%**  
increase in  
last 20 years

Cohort: Women Veteran VHA patients in each year. Women in FY00: N=159,810; Women in FY19: N=538,206.  
Source: WHEI Master Database, FY00-FY19

# Age Distribution of Women Veterans in VA FY10-FY20



# Women Veteran research is growing also



Our goal is to describe the **breadth and depth** of Women Veterans' health literature from 2016-2023

# What is an Evidence Map?

- A review that “aims to identify what is known about a topic, what research exists on a particular research question”
- What can an evidence map tell us?
  - A **broad** overview of a topic area
  - Areas of richness in a body of literature
  - Areas for future growth
- What does an evidence map not tell us?
  - Synthesis of findings within and across a body of literature
  - Summary effect estimates

# We used rigorous Evidence Map methods

# ESP

Searched multiple databases from 1/2016 to 10/2023

Identified articles that report health outcomes specifically for Women Veterans

Team was trained and calibrated

Screened every citation by title & abstract and then full text

Abstracted key article info

Grouped articles by focus area



We grouped articles by primary and secondary focus areas that were **previously identified as critically important to women Veterans' health**



# Focus Areas



## Mental Health

- General Mental Health
- Suicide/Self-Injury
- Substance Use
- Reproductive Mental Health

# Focus Areas



## Mental Health

- General Mental Health
- Suicide/Self-Injury
- Substance Use
- Reproductive Mental Health



## Medical Conditions

- Chronic Conditions
- Reproductive Health
- Chronic Pain
- Preventive Health
- Cancer
- Long-term care & Aging

# Focus Areas



## Mental Health

- General Mental Health
- Suicide/Self-Injury
- Substance Use
- Reproductive Mental Health



## Medical Conditions

- Chronic Conditions
- Reproductive Health
- Chronic Pain
- Preventive Health
- Cancer
- Long-term care & Aging



## Other focus areas

- Interpersonal violence
- Harassment & Discrimination
- Other Violence
- Access to Care
- Healthcare Organization
- Toxic Exposure
- Social Determinants of Health

4,205 articles reviewed at title & abstract

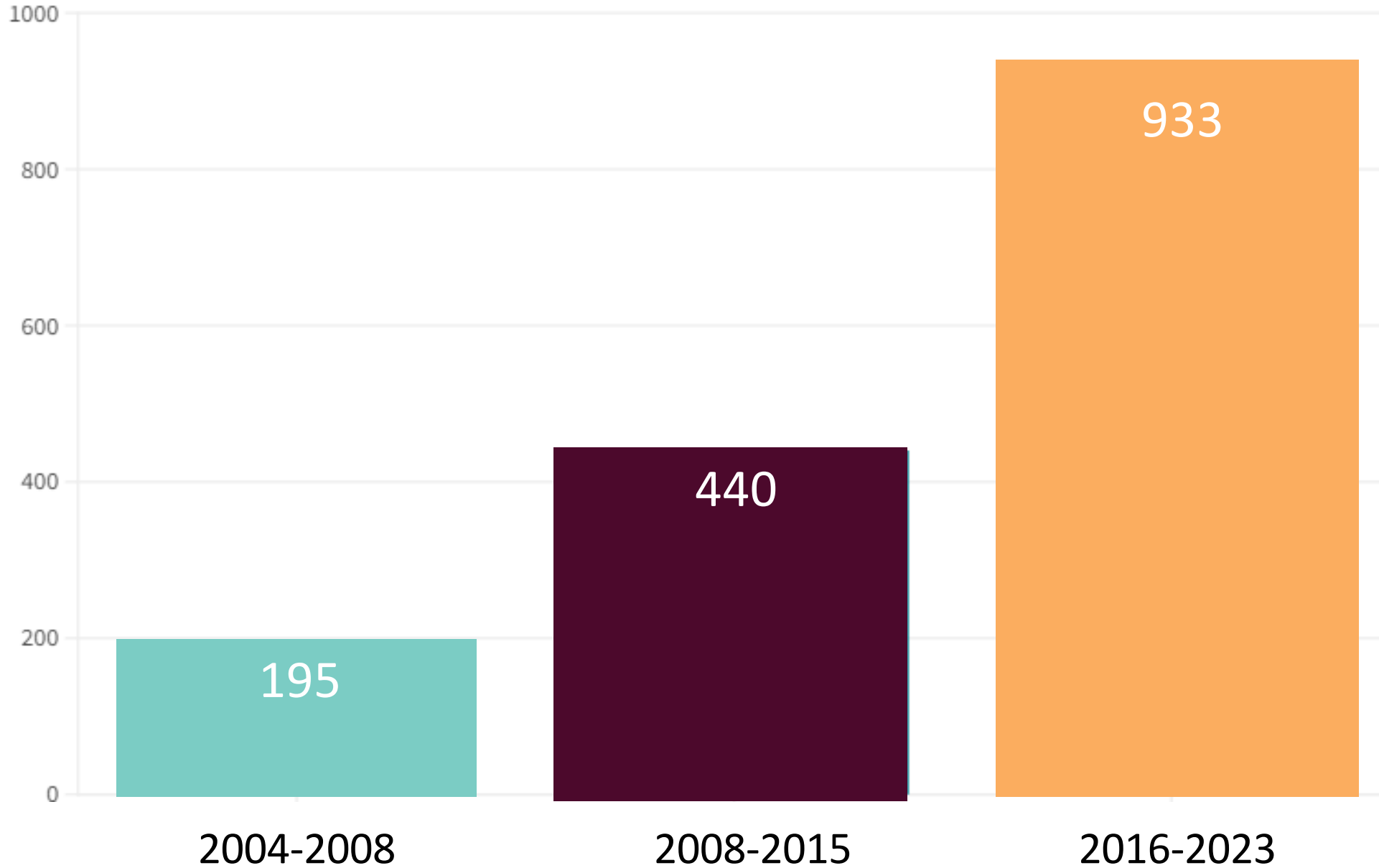


1,762 reviewed at full-text



933 articles met  
eligibility criteria

# Number of Women Veterans' Health Publications by year

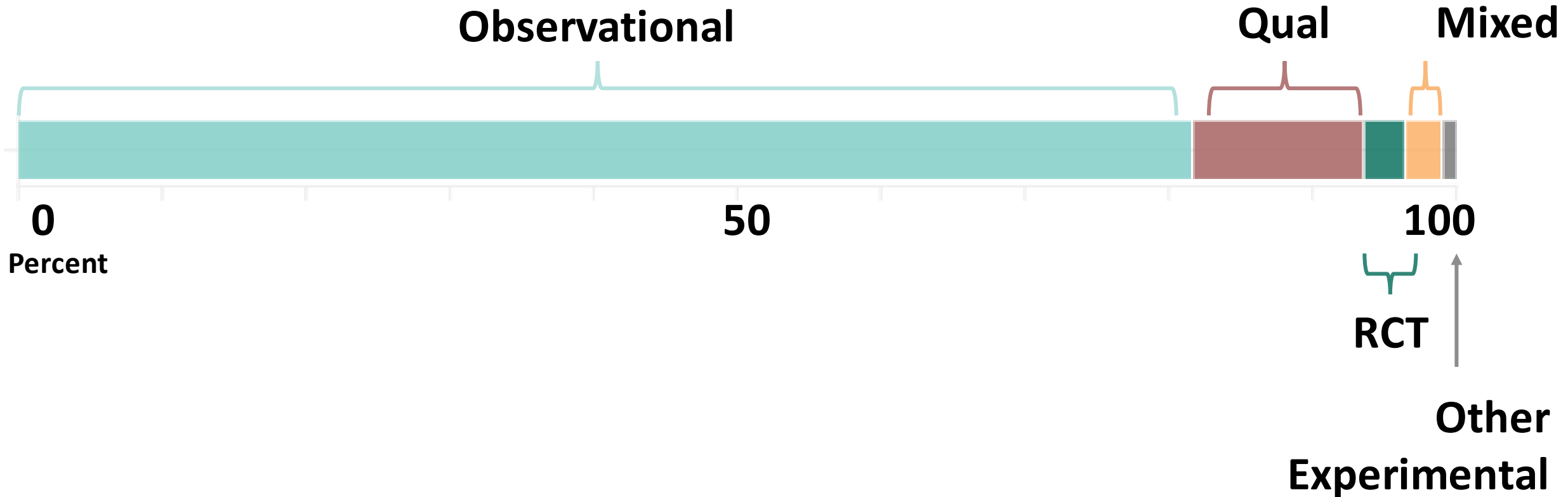


**Two-fold  
increase in  
volume of  
literature vs  
prior 8  
years**



599 unique  
first authors

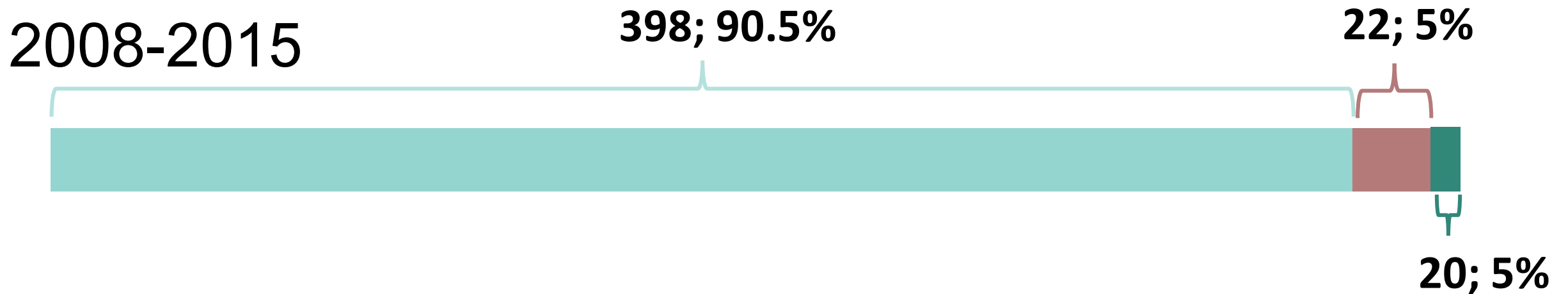
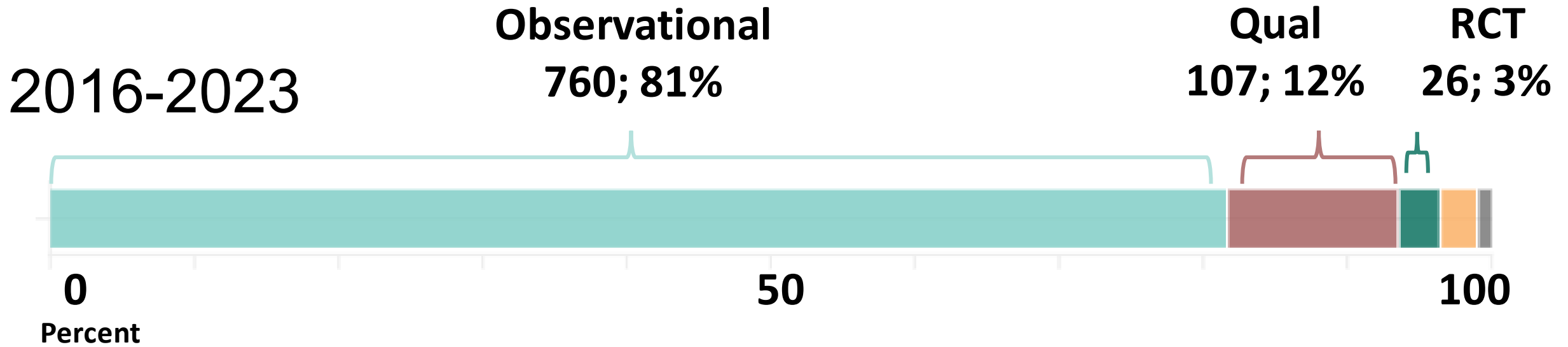
# What kinds of studies were represented?



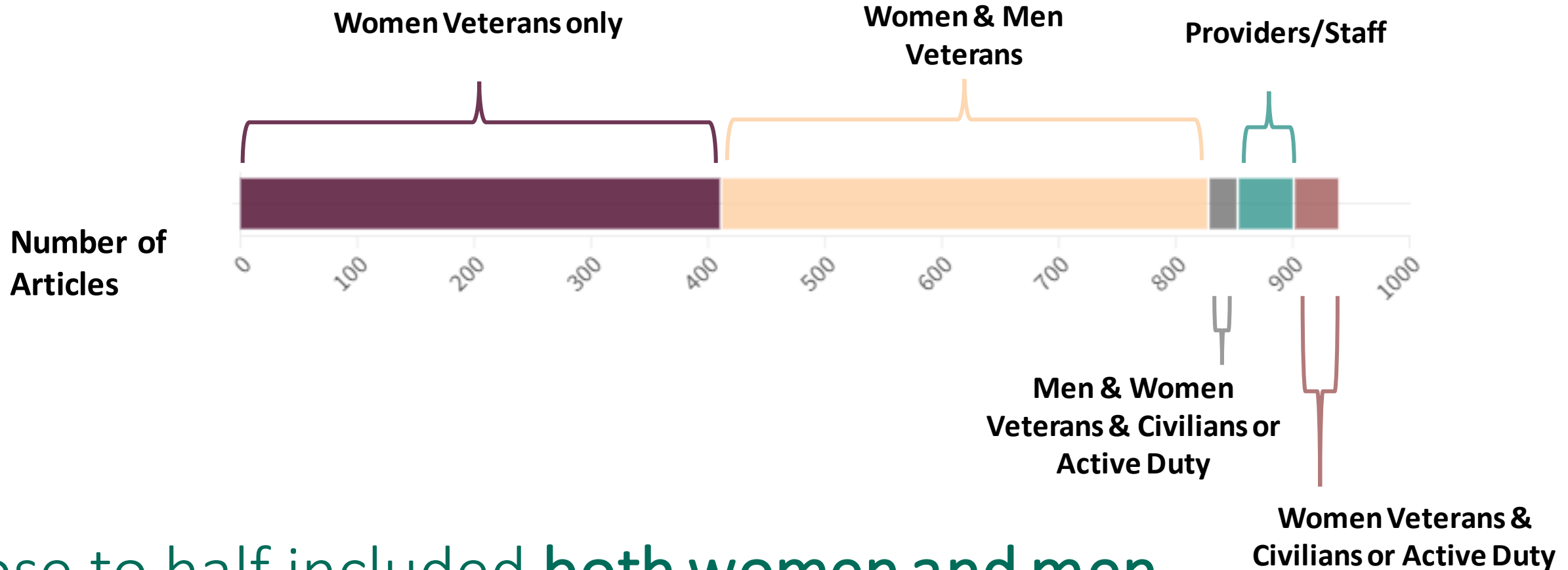
Most of the articles were **descriptive**



# Comparison to prior map:

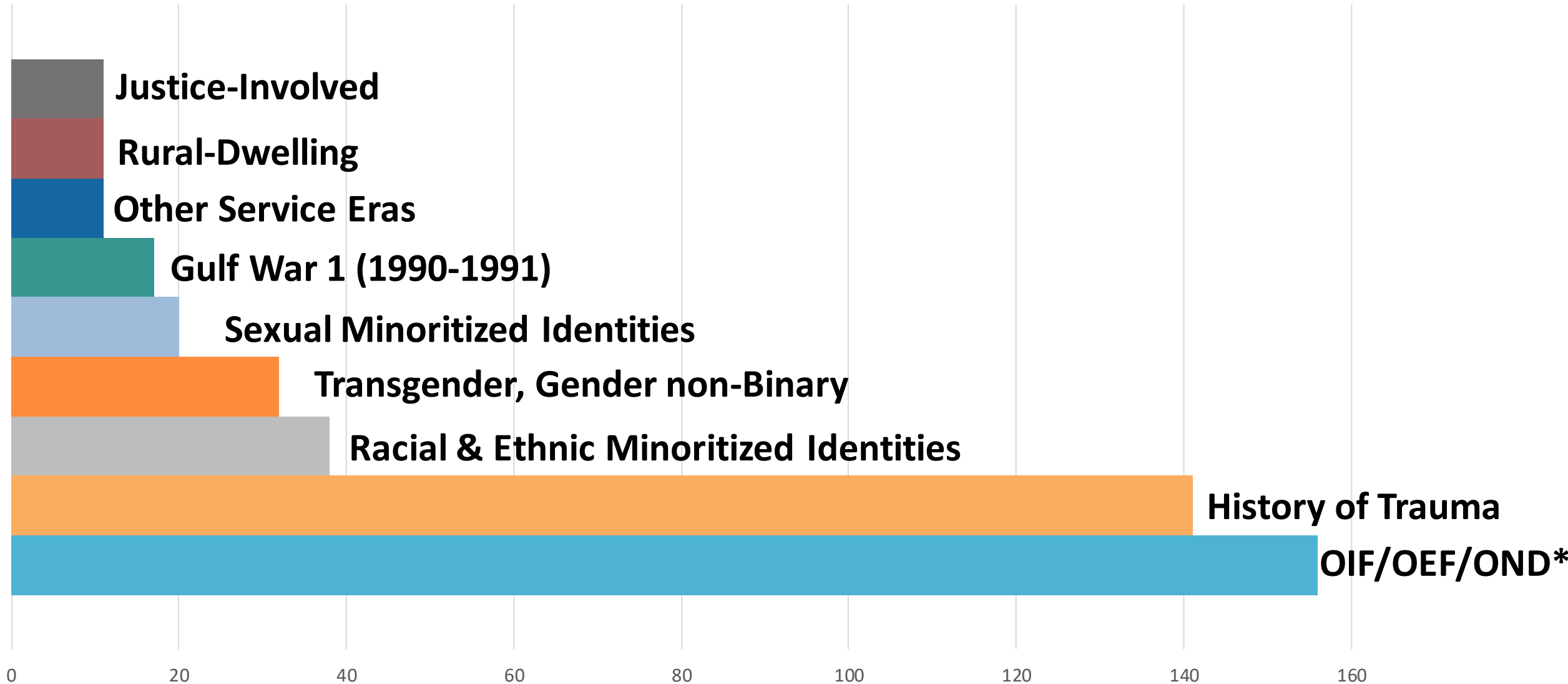


# Who were the participants?



Close to half included **both women and men**

# Which populations were sought for inclusion?



Number of articles

\*Operation Enduring Freedom, Operation Iraqi Freedom, Operation New Dawn

Most articles reported if funded or not (91%, 850)



592 articles reported a single source of funding

210 articles reported multiple sources of funding

48 articles reported no funding

# Portion of studies reporting *at least some* funding from:

VA: 73%

NIH: 20%

Dept of Defense: 5%

University: 4%

Foundation: 3%

Industry: 3%



Mental Health



Medical Conditions



Other focus areas





Focus areas under  
**Mental Health**

350 Articles

General Mental Health

Suicide/Self-injury

Substance Use

Reproductive Mental Health

Number of articles per focus area



**General Mental Health**

203

**Substance Use**

71

**Suicide/Self-Injury**

55

**Reproductive Mental Health**

21

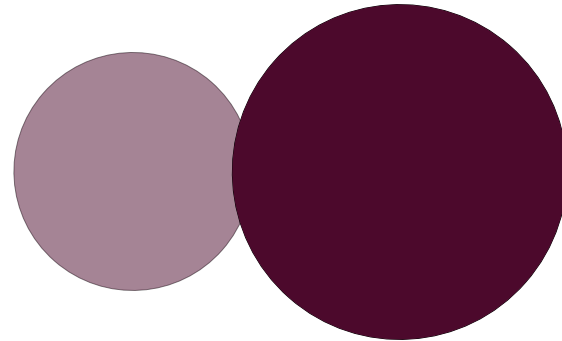
General Mental Health is the largest overall category and includes PTSD, depression, disordered eating



Growth since 2008-2015 map per focus area

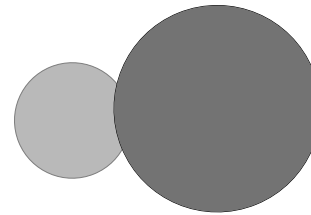


**General Mental Health**



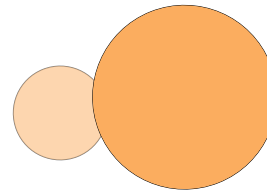
109% increase

**Substance Use**



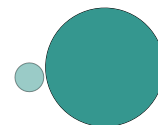
255% increase

**Suicide/Self-Injury**



323% increase

**Reproductive Mental Health**



425% increase

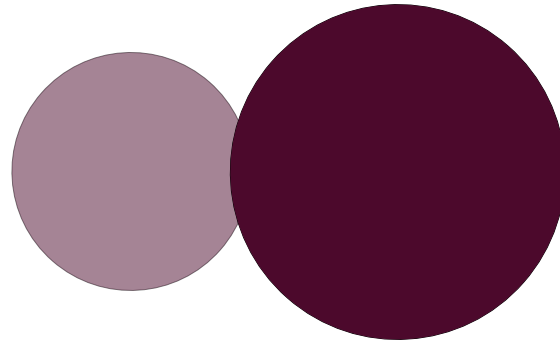
Greatest  
increases

Growth since 2008-2015 map per focus area



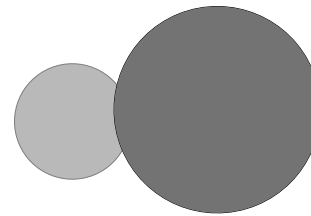
Modest  
growth

**General Mental Health**



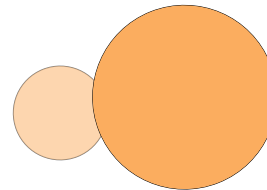
109% increase

**Substance Use**



255% increase

**Suicide/Self-Injury**



323% increase

**Reproductive Mental Health**



425% increase

# Highlighted Focus Areas

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# General Mental Health ( $k=203$ )



- 161 observational studies
- 13 RCTs - primarily focused on patient-level treatment and screening approaches
- 114 studies with women and men, 80 WV only
- 57 articles prioritized OEF/OIF/OND Veterans
- 51 prioritized Veterans with a history of trauma

# General Mental Health ( $k=203$ )



- 161 observational studies
- 13 RCTs - primarily focused on patient-level treatment and screening approaches
- 114 studies with women and men, 80 WV only
- 57 articles prioritized OEF/OIF/OND Veterans
- 51 prioritized Veterans with a history of trauma

- 95 articles focused on PTSD (primarily diagnosis and care delivery)
- Most common secondary focus areas: Access to care, Interpersonal violence
- Relatively little on common conditions such as depression and anxiety
- Little focus on conditions among rural-dwelling or other minoritized populations

# Substance Use ( $k=71$ )



- 57 observational studies
- 4 RCTs – treatment interventions (ex: gender-focused recovery model)
- 34 studies with men and women, 19 WV only
- 14 articles prioritized transgender/sexual minority Veterans
- 10 articles prioritized OEF/OIF/OND Veterans

# Substance Use ( $k=71$ )



- 57 observational studies
- 4 RCTs – treatment interventions (ex: gender-focused recovery model)
- 34 studies with men and women, 19 WV only
- 14 articles prioritized transgender/sexual minority Veterans
- 10 articles prioritized OEF/OIF/OND Veterans

- Alcohol and tobacco were the most common substances studied
- Most common secondary focus areas: Access to Care and Preventive Health
- Topic areas include understanding gender disparities, determining prevalence of SUD, and understanding stress and substance use
- Few articles addressed opioid or other substance misuse

# Reproductive Mental Health (k=21)



- 15 observational studies
- 17 WV only studies
- 2 articles prioritized Veterans with history of trauma
- 1 article each prioritized OEF/OIF/OND and rural dwelling Veterans
- 3 qualitative studies, mix of providers and Veterans



# Reproductive Mental Health (k=21)



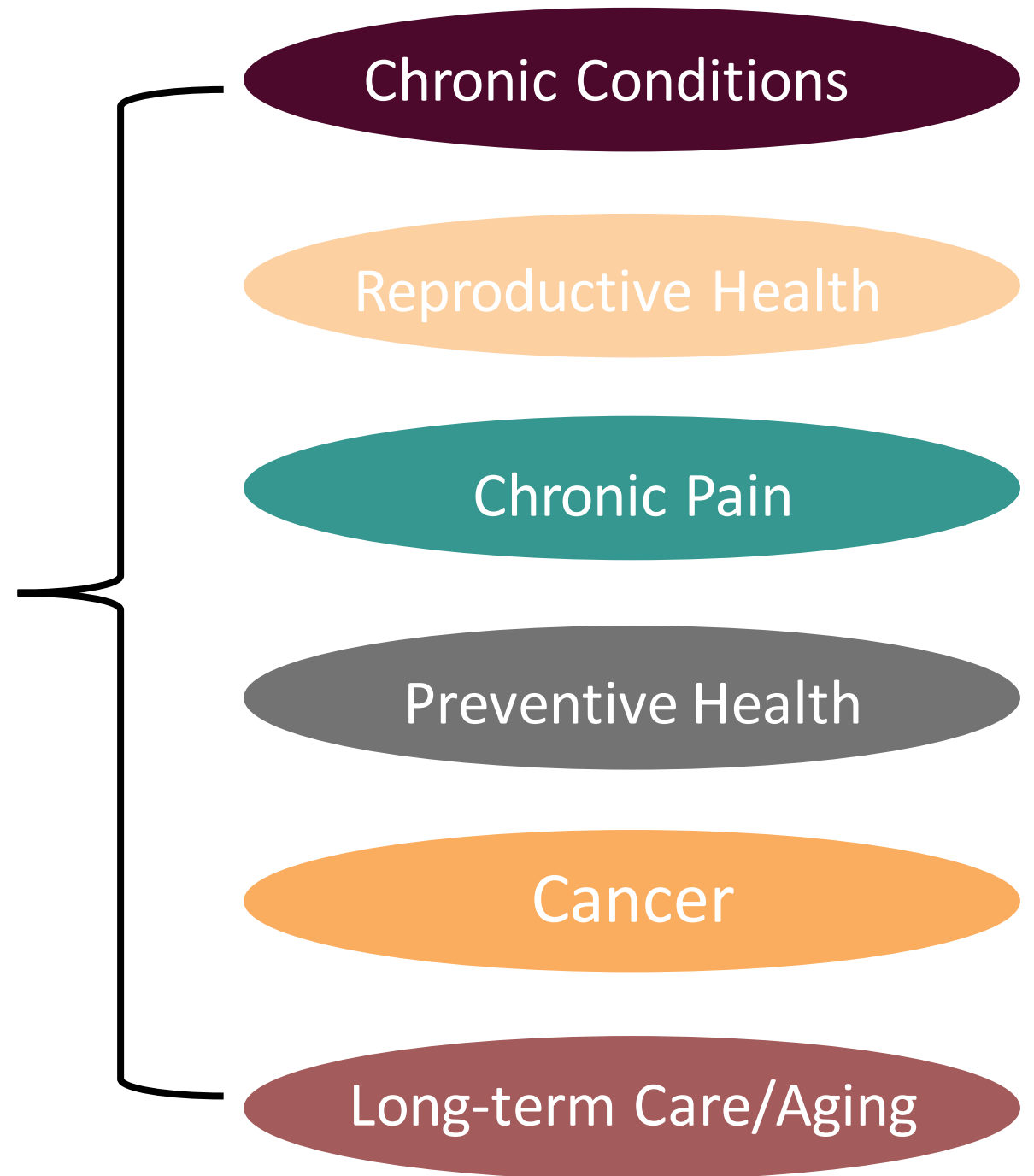
- 15 observational studies
- 17 WV only studies
- 2 articles prioritized Veterans with history of trauma
- 1 article each prioritized OEF/OIF/OND and rural dwelling Veterans
- 3 qualitative studies, mix of providers and Veterans

- Largely prevalence and risk factors of peripartum conditions and their care
- Most common secondary focus areas: Access to Care and Health Care Org
- **Example:** evaluation of internet delivered CBT for postpartum depression
- Only 3 articles addressed sexual functioning



# Focus areas under **Medical Conditions**

344 Articles



## Number of articles per focus area

**Chronic Medical  
Conditions**

137

**Reproductive Health**

88

**Preventive Health**

46

**Chronic pain/opioid use**

30

**Long-term Care/Aging**

21

**Cancer**

12

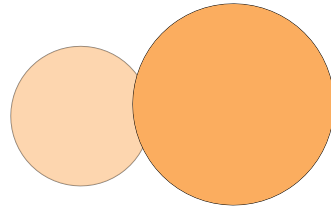


The largest portion on medical conditions addresses chronic disease (eg, heart disease) and reproductive health issues (eg, peripartum health)

Growth since 2008-2015 map per focus area

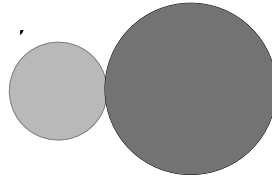


**Chronic Medical Conditions**



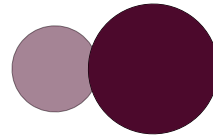
132% increase

**Reproductive Health**



267% increase

**Preventive Health**



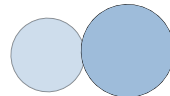
156% increase

**Chronic pain/opioid use**



329% increase

**Long-term Care/Aging**



62% increase

**Cancer**

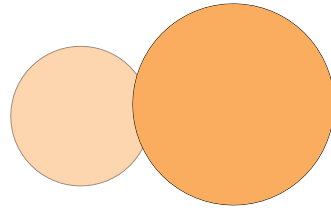


100% increase

Growth since 2008-2015 map per focus area

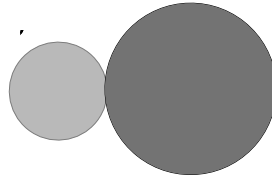


**Chronic Medical Conditions**



132% increase

**Reproductive Health**



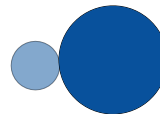
267% increase

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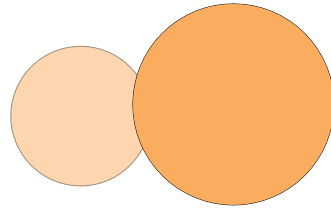
100% increase

Greatest  
increases

Growth since 2008-2015 map per focus area

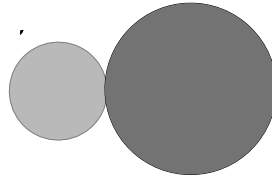


**Chronic Medical Conditions**



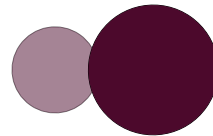
132% increase

**Reproductive Health**



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**Preventive Health**



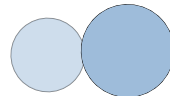
156% increase

**Chronic pain/opioid use**



329% increase

**Long-term Care/Aging**



62% increase

**Cancer**



100% increase

Modest  
growth

# Highlighted Focus Areas

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# Chronic Medical Conditions ( $k=137$ )



- 129 observational studies
- 2 RCTs, 1 systematic review
- 95 mixed gender studies, 36 WV only
- 13 studies prioritized OEF/OIF/OND Veterans
- 8 studies prioritized Gulf War Era Veterans



# Chronic Medical Conditions ( $k=137$ )



- 129 observational studies
- 2 RCTs, 1 systematic review
- 95 mixed gender studies, 36 WV only
- 13 studies prioritized OEF/OIF/OND Veterans
- 8 studies prioritized Gulf War Era Veterans

- 32 articles on cardiovascular disease (primarily atherosclerotic cardiovascular disease,  $k=26$ );
  - **Examples:** Risk calculation assessment in two large cohort studies; association of mental health and CVD
- Few articles on hypertension, back pain disorders, migraines

# Reproductive Health ( $k=88$ )



- 79 observational studies
- 5 qualitative articles, no RCTs
- 75 WV only studies
- 15 articles included racial/ethnic minoritized Veterans
- 5 articles included OEF/OIF/OND Veterans

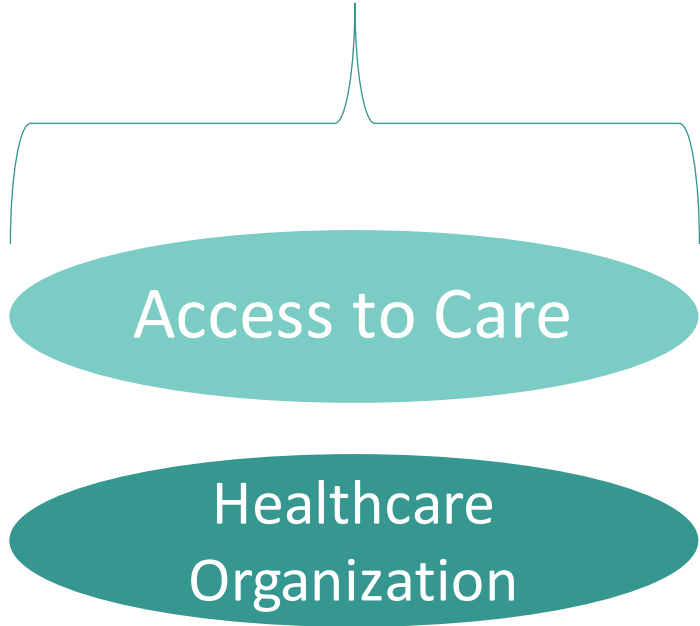
# Reproductive Health ( $k=88$ )



- 79 observational studies
- 5 qualitative articles, no RCTs
- 75 WV only studies
- 15 articles included racial/ethnic minoritized Veterans
- 5 articles included OEF/OIF/OND Veterans

- Largely maternal health, family planning, and uterine conditions
- Most common secondary focus areas: Healthcare Organization & Access to Care
- 7 articles focused on menopause care:
  - **Examples:** hormone therapy, vasomotor symptoms, portal based educational intervention

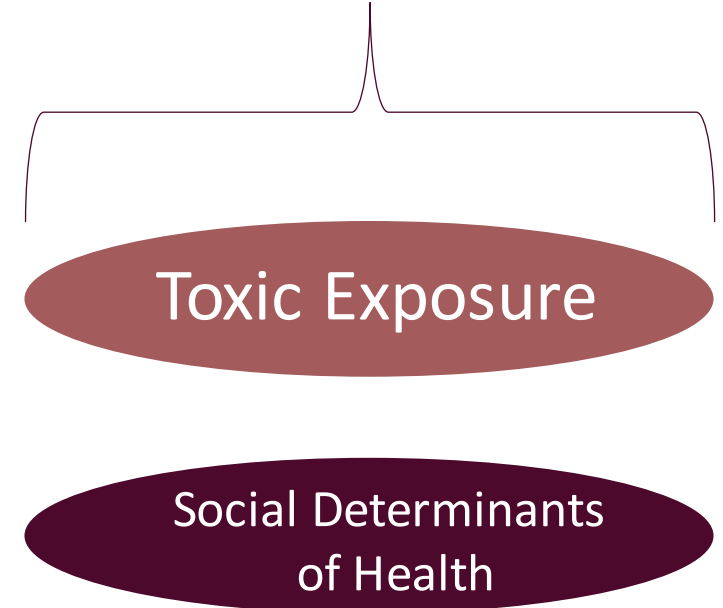
## Structures of Care



## Trauma, Violence, and Stressful Experiences



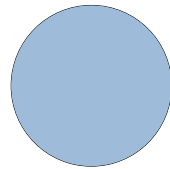
## Other Areas



## Structures of Care

Number of articles per focus area

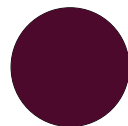
**Healthcare  
Organization**



50

How care is delivered and how it is experienced in the VA for women Veterans generally

**Access to Care**

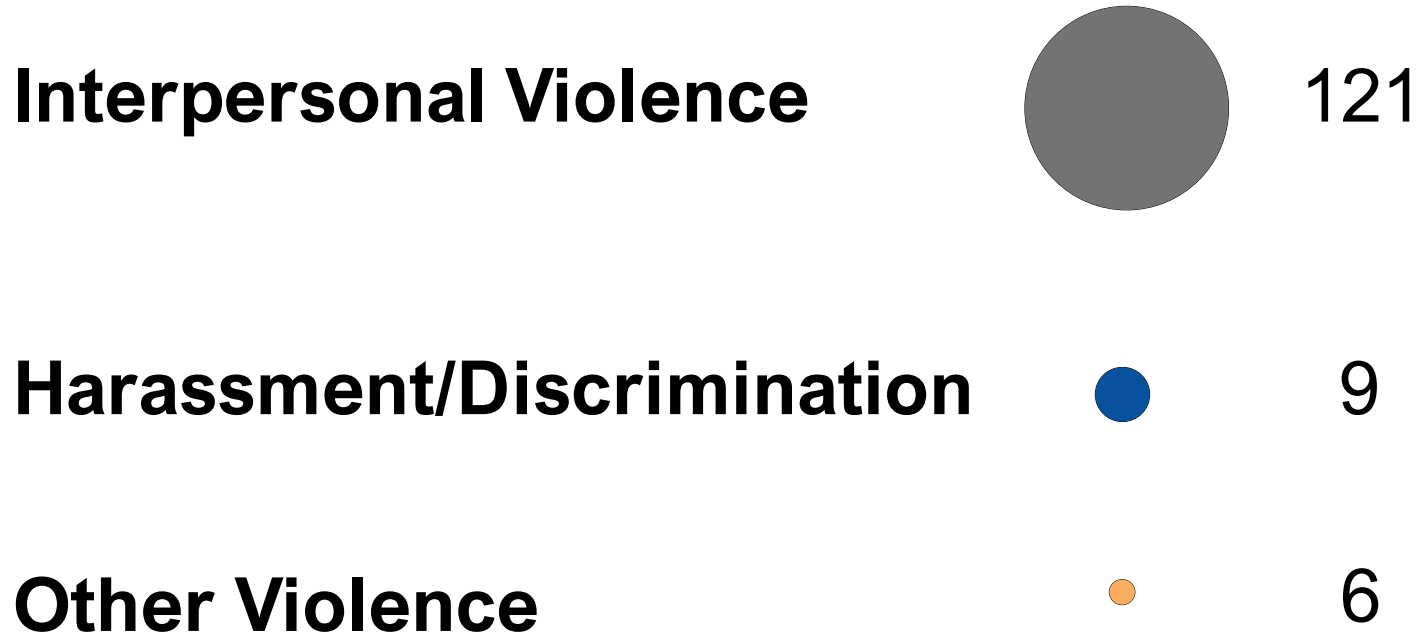


30

Included 8 articles about access to care for LGBTQ+ Veterans

# Number of articles per focus area

Trauma, Violence, and Stressful Experiences

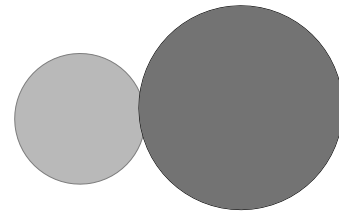


Interpersonal violence includes intimate partner violence and military sexual trauma

Trauma, Violence, and Stressful Experiences

Growth since 2008-2015 map per focus area

**Interpersonal Violence**



163% increase

**Harassment/Discrimination**

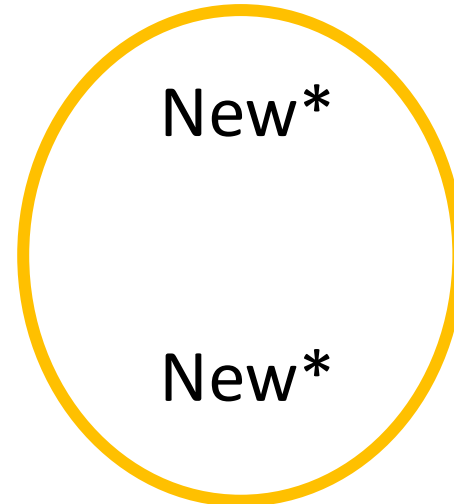


New\*

**Other Violence**



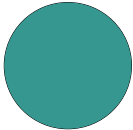
New\*



Other Areas

Number of articles per focus area

**Social Determinants  
of Health**



30

15 articles on housing  
instability

**Toxic Exposure**



3

Both are new focus areas



# Highlighted Focus Area

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# Interpersonal Violence ( $k=121$ )



- 89 observational and 24 qualitative studies
- 4 RCTs
- 69 WV only
- 58 studies prioritized Veterans with a history of Trauma
- 26 studies prioritized OEF/OIF/OND Veterans

# Interpersonal Violence ( $k=121$ )



- 89 observational and 24 qualitative studies
- 4 RCTs
- 69 WV only
- 58 studies prioritized Veterans with a history of trauma
- 26 studies prioritized OEF/OIF/OND Veterans

- Many articles focused on prevalence of IPV/MST or associations between IPV/MST and physical and mental health outcomes
- Top secondary focus areas: General mental health and Access to care
- **Examples:** Qualitative studies focused on understanding MST and VA care experiences; 1 RCT looked at implementation of intimate partner violence screening

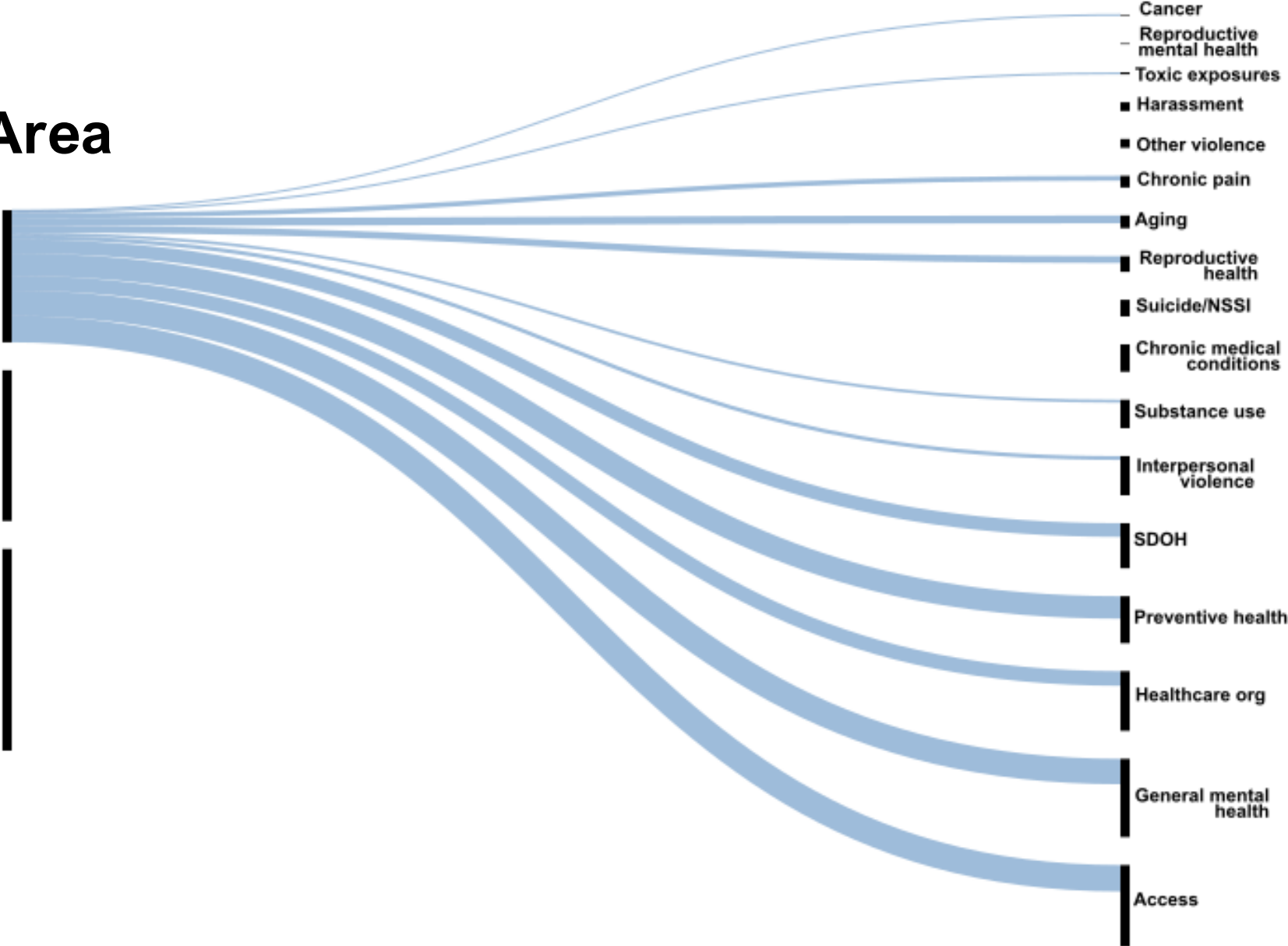


# Secondary Focus areas

# Secondary Focus Area

# Primary Focus Area

Chronic Medical conditions



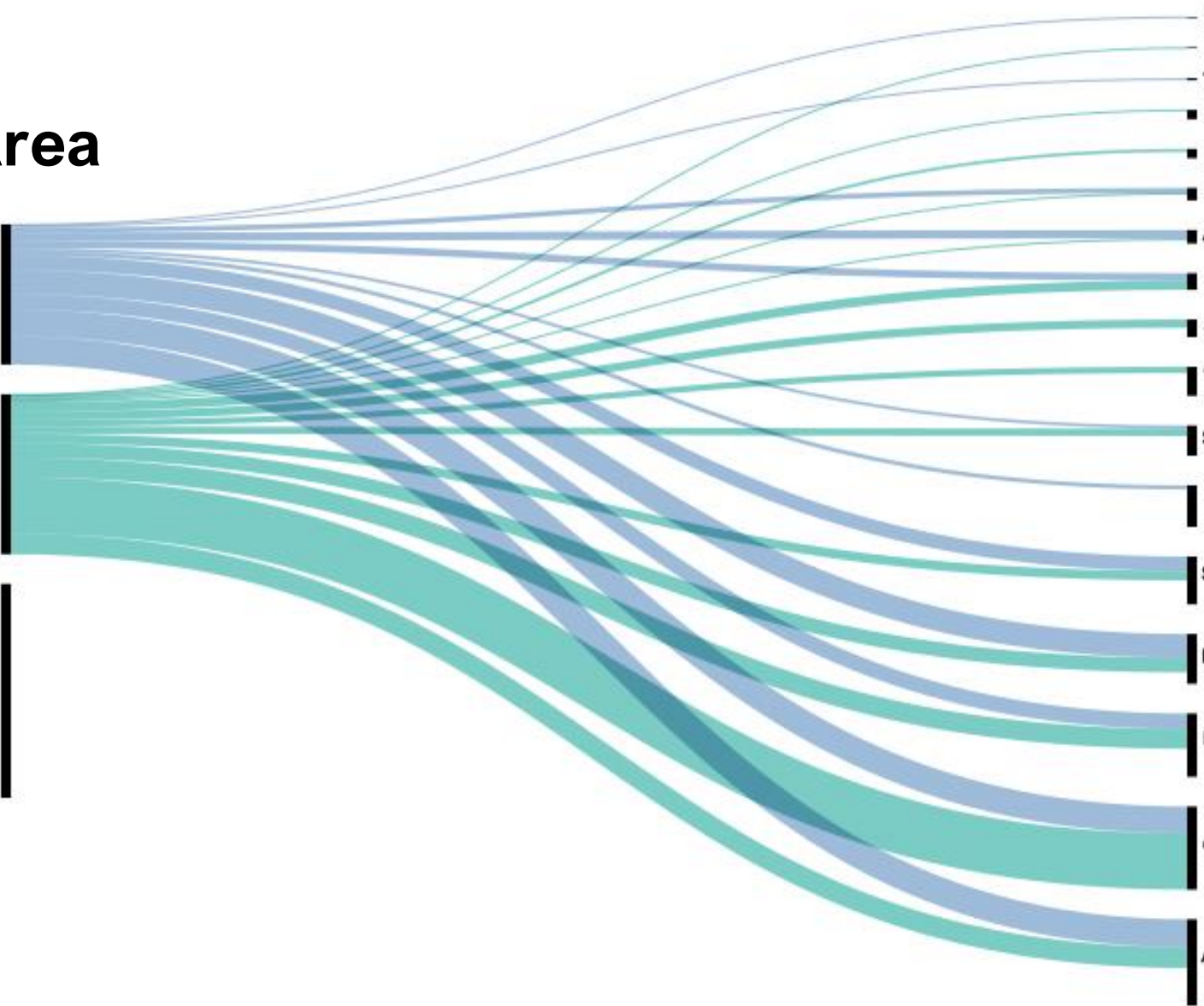
# Secondary Focus Area

# Primary Focus Area

Chronic Medical conditions

Interpersonal violence

- Cancer
- Reproductive mental health
- Toxic exposures
- Harassment
- Other violence
- Chronic pain
- Aging
- Reproductive health
- Suicide/NSSI
- Chronic medical conditions
- Substance use
- Interpersonal violence
- SDOH
- Preventive health
- Healthcare org
- General mental health
- Access



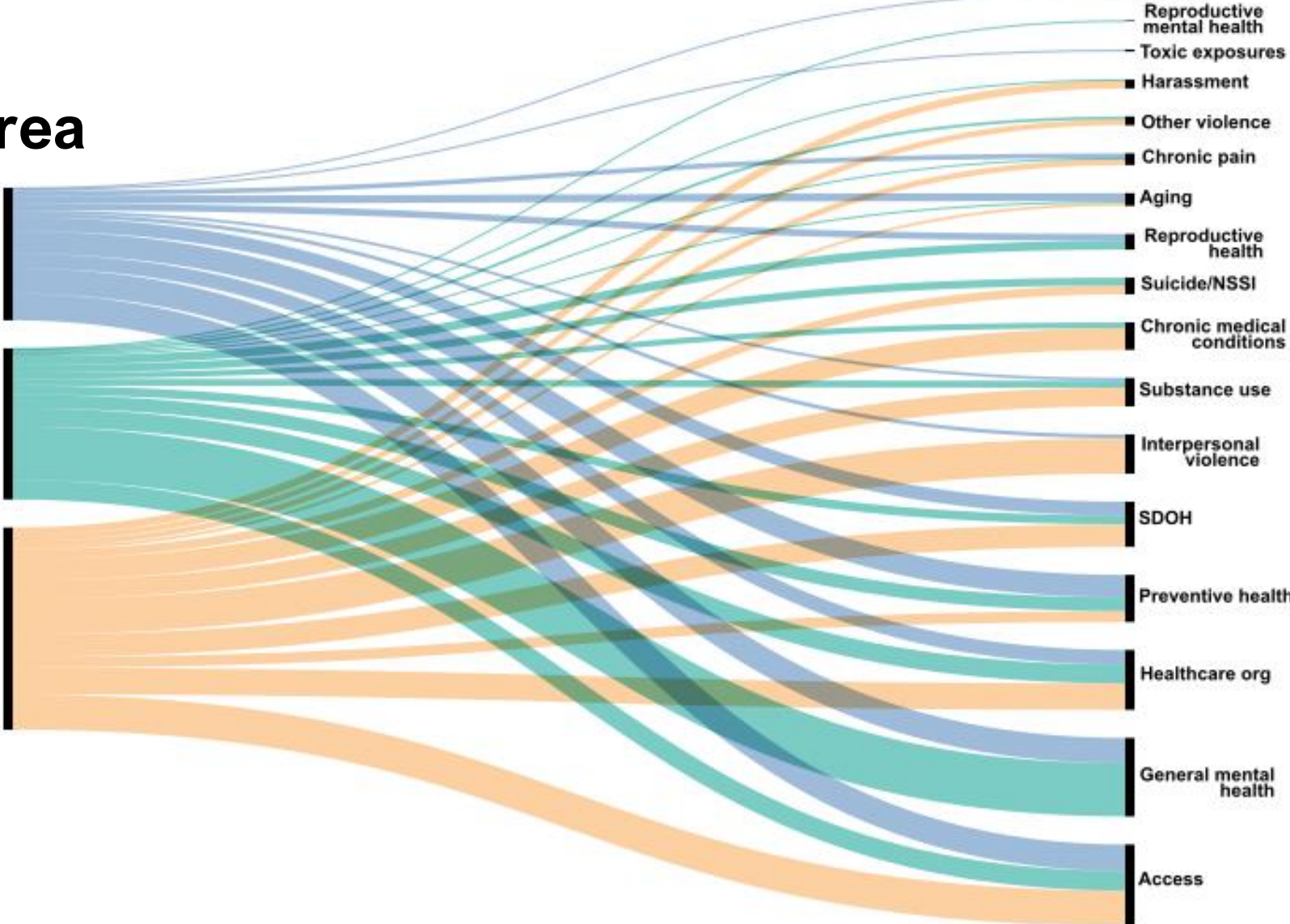
# Secondary Focus Area

# Primary Focus Area

Chronic Medical conditions

Interpersonal violence

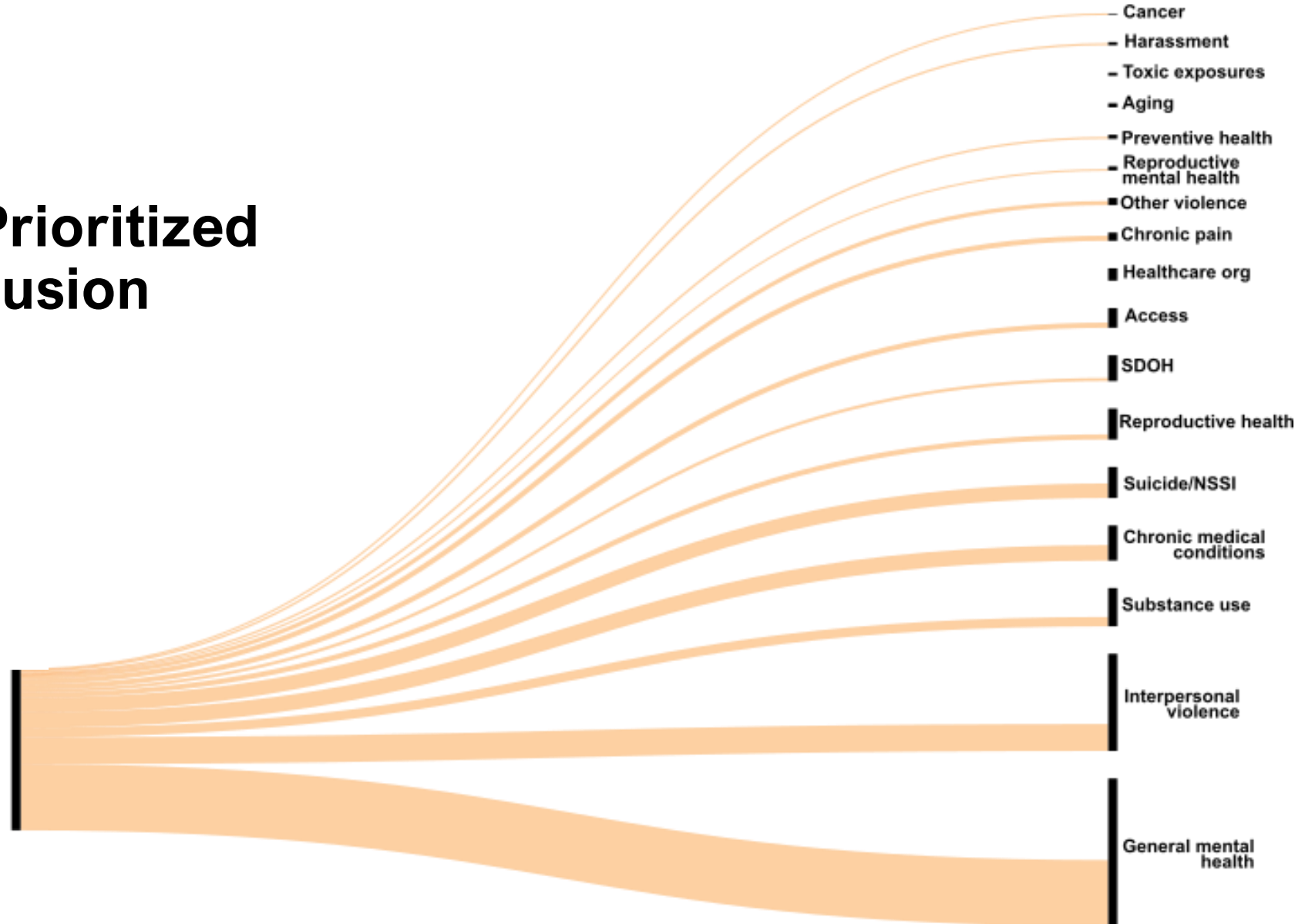
General Mental Health



# Populations Prioritized for Study Inclusion

OIF/OEF/OND

## Primary Focus Areas



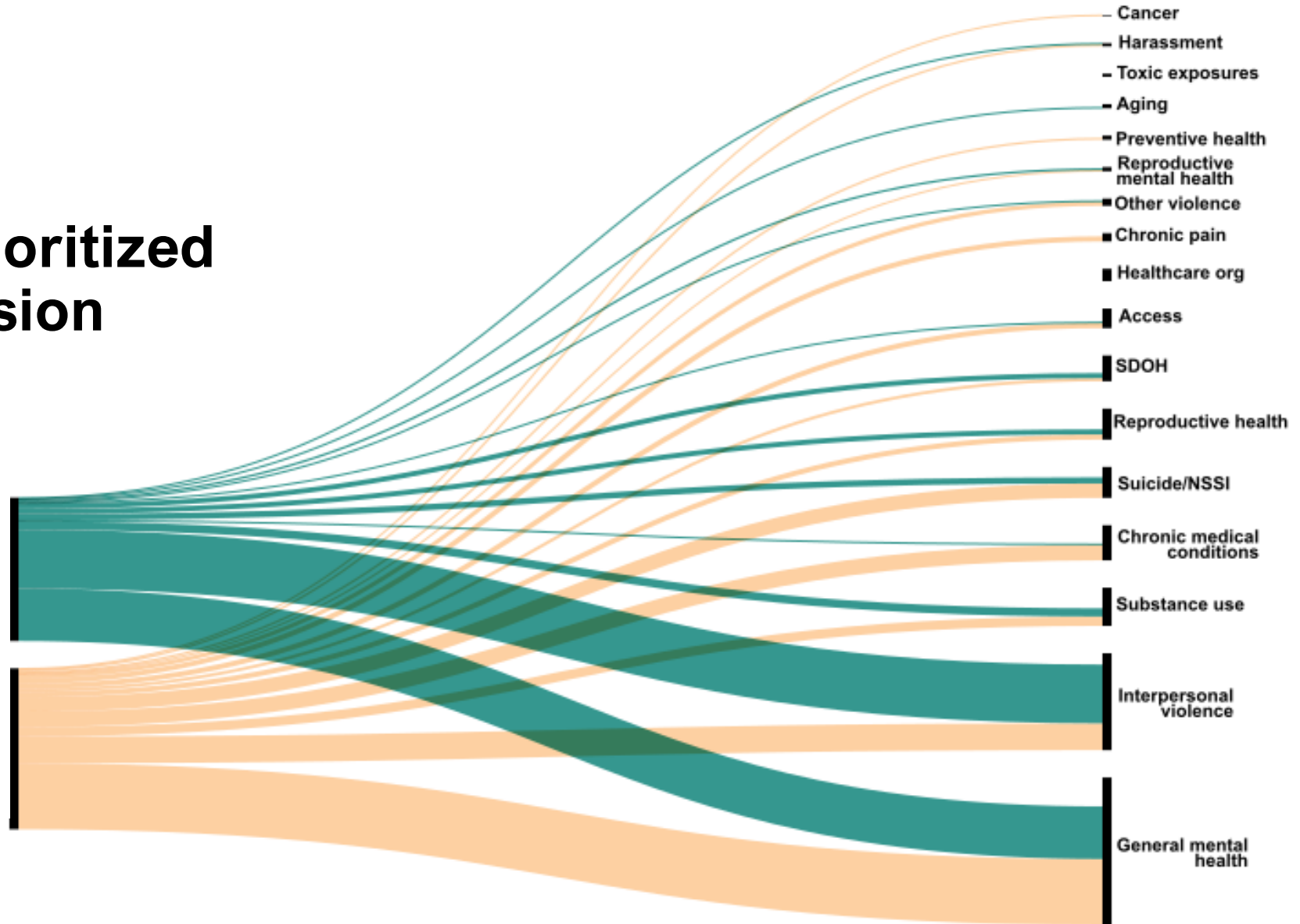


# Populations Prioritized for Study Inclusion

## Primary Focus Areas

History of Trauma

OIF/OEF/OND



# Populations Prioritized for Study Inclusion

## Primary Focus Areas

Racial/Ethnic Minoritized

History of Trauma

OIF/OEF/OND

- Cancer
- Harassment
- Toxic exposures
- Aging
- Preventive health
- Reproductive mental health
- Other violence
- Chronic pain
- Healthcare org
- Access
- SDOH
- Reproductive health
- Suicide/NSSI
- Chronic medical conditions
- Substance use
- Interpersonal violence
- General mental health



# How to use this evidence map

- Identify rich areas for further exploration and possible systematic reviews
- Identify gaps in need of additional investigation
- Consider differences by populations
- Push areas along the innovation pipeline



## SUMMARY OF INCLUDED STUDIES

	Systematic Reviews <i>k</i> = 17	Other (Methods Development, Protocols, Program Eval/QI) <i>k</i> = 71	Qualitative <i>k</i> = 106	Observational <i>k</i> = 686	Mixed Methods <i>k</i> = 21	Experimental	
						Efficacy/Effectiveness <i>k</i> = 22	Implementation <i>k</i> = 10
<b>Preventative health</b>	0 studies	7 studies	6 studies Median participants: 27.5 4 studies of women only	30 studies Median participants: 329,965.5 9 studies of women only	1 study Median participants: 5 0 studies of women only	1 study Median participants: 883 1 studies of women only	1 study Median participants: 58,159 0 studies of women only
<b>Access to care/utilization</b>	1 study	0 studies	7 studies Median participants: 51 4 studies of women only	20 studies Median participants: 6,728 11 studies of women only	1 study Median participants: 68 0 studies of women only	0 studies	1 study Median participants: 11,337 0 studies of women only
<b>Health care delivery</b>	1 study	13 studies	15 studies Median participants: 35 7 studies of women only	19 studies Median participants: 1,395 6 studies of women only	2 studies Median participants: 22 1 studies of women only	0 studies	0 studies
<b>Reproductive health</b>	1 study	7 studies	6 studies Median participants: 28.5 5 studies of women only	69 studies Median participants: 1,341 59 studies of women only	3 studies Median participants: 979 2 studies of women only	0 studies	2 studies Median participants: 12,206 2 studies of women only
<b>Chronic medical conditions</b>	1 study	8 studies	5 studies Median participants: 24 2 studies of women only	120 studies Median participants: 58,525 27 studies of women only	1 study Median participants: 119 1 studies of women only	1 studies Median participants: 481 0 studies of women only	1 study Median participants: 14,792 0 studies of women only

## INCLUDED STUDIES

Author, Year	Title	Target Population	Secondary Focus Area	Sub-Focus Area
<i>General Mental Health</i>				
Liu, 2019 <sup>375</sup>	The prevalence and trend of depression among Veterans in the United States	General population/not specified	N/a	Depression
Davis, 2016 <sup>22</sup>	Women Veterans with Depression in Veterans Health Administration Primary Care: An Assessment of Needs and Preferences	General population/not specified	N/a	Depression
Sairsingh, 2018 <sup>376</sup>	Depression in Female Veterans Returning from Deployment: The Role of Social Factors	OEF/OIF/OND	SDOH combat exposure	Depression
Anderson, 2023 <sup>377</sup>	Baseline platelet serotonin in a multi-site treatment study of depression in Veterans administration patients: Distribution and effects of demographic variables and serotonin reuptake inhibitors	General population/not specified	N/a	Depression
Lam, 2017 <sup>23</sup>	Differences in Depression Care for Men and Women among Veterans with and without Psychiatric Comorbidities	General population/not specified	N/a	Depression
Thomas, 2016 <sup>378</sup>	Predictors of Depression Diagnoses and Symptoms in United States Female Veterans: Results from a National Survey and Implications for Programming	General population/not specified	Health care organization/delivery of care for WVs SDOH	Depression
Borowski, 2021 <sup>379</sup>	Work-family conflict and subsequent depressive symptoms among war-exposed post-9/11 U.S. military Veterans	OEF/OIF/OND	work-family conflict	Depression
Curry, 2021 <sup>380</sup>	Sex differences in predictors of recurrent major depression among current-era military Veterans	OEF/OIF/OND	traumatic experiences	Depression
King, 2023 <sup>18</sup>	Qualitative Exploration of Factors Influencing Women Veterans' Disordered Eating Symptoms and Treatment Preferences in VHA Primary Care	General population/not specified	Access to care/utilization Health care organization/delivery of care for WVs	Disordered eating
Breland, 2017 <sup>381</sup>	Military experience can influence Women's eating habits	General population/not specified	N/a	Disordered eating
Breland, 2016 <sup>19</sup>	Women Veterans' Treatment Preferences for Disordered Eating	General population/not specified	Health care organization/delivery of care for WVs	Disordered eating

## CHARACTERISTICS OF INCLUDED RCTS

Author Year N (% women)	Title	Objective	Secondary Focus Areas	Target Populations Funding
<i>General Mental Health</i>				
Aciemo, 2021 <sup>343</sup> 136 (100%)	A Randomized Clinical Trial of In-person vs. Home-based Telemedicine Delivery of Prolonged Exposure for PTSD in Military Sexual Trauma Survivors	This study used a randomized controlled design to examine PTSD and depression symptom outcomes, overall number of sessions completed.	Access to care/utilization	History of trauma DOD

## CHARACTERISTICS OF INCLUDED PROGRAM EVALUATIONS AND QI STUDIES

Author, Year, N (% Women)	Title	Objective	Secondary Focus Areas	Target Populations Funding
<i>General Mental Health</i>				
Bauer, 2021 <sup>355</sup> 80 (66%)	A Resource Building Virtual Care Programme: improving symptoms and social functioning among female and male rural Veterans	This project aimed to (1) identify whether webSTAIR would effectively improve PTSD and depression, (2) identify whether the programme would improve functioning, particularly social functioning and the related outcomes of emotion regulation and interpersonal skills, and (3) assess programme feasibility and satisfaction.	Health care organization/delivery of care for WV	History of trauma VA

## Summary



**U.S. Department of Veterans Affairs**

Veterans Health Administration  
*Health Systems Research*

- 933 articles published since 2015
- The volume of Women Veterans' health literature is double that of the prior 8 years
- Largest areas related to:
  - General Mental Health (including PTSD)
  - Interpersonal Violence
  - Chronic Medical Conditions



- Areas with the greatest growth include:
  - Reproductive Health
  - Reproductive Mental Health
  - Suicide/non-suicidal self-injury
  - Chronic pain

- Harassment and discrimination experienced at health care facilities
- Military-related toxic exposures
- Health issues among transgender and gender non-binary individuals
- Cancer care among women Veterans

- Long-term care & aging
- Common chronic conditions such as hypertension, migraines, back pain
- Few clinical trials and implementations trials
- Little change in sex-stratified analyses in studies including both women and men

- Post traumatic stress disorder
- Substance use
- Reproductive Mental Health
- Updates to interpersonal violence topics

# Some potential areas for future reviews

- Post traumatic stress disorder
- Substance use
- Reproductive Mental Health
- Updates to interpersonal violence topics

Women Veteran Research Map (2016-2023)

Evidence Synthesis Program

## CHARACTERISTICS OF INCLUDED SYSTEMATIC REVIEWS

Author, Year, N Articles	Title	Objective	Secondary Focus Area(s)	Prioritized Populations Funding
<i>Mental Health Not Otherwise Categorized (General Mental Health)</i>				
Creech, 2021 <sup>17</sup> 21	Clinical Complexity in Women Veterans: A Systematic Review of the Recent Evidence on Mental Health and Physical Health Comorbidities	The aim of this systematic review was to evaluate and synthesize research published between 2008 and 2015 and identified in the WVs Health Research Evidence Map as related to mental and physical health comorbidities among WVs.	Chronic medical conditions	N/A VA

1. The volume of women Veterans' health literature has grown tremendously in the last 8 years, including in areas of particular importance for the VA
2. The literature largely remains observational in nature with small growth in studies that test solutions to problems or the implementation of evidence-based practices for women Veterans
3. Gaps remain in areas that will be particularly relevant to the growing and aging women Veteran population

Pace R, Dancu C, Raman SR, Bridges-Curry Z, Klimek-Johnson Z, Jeevananthan A, Gallion AH, Der T, Alishahi Tabriz A, Sprague S, Rushton S, Hammer AJ, Sims CA, Coleman JN, Martino J, Cantrell S, Gordon AM, Jacobs M, Alexopoulos A, Gierisch JM, Goldstein KM.

*An Evidence Map of the Women Veterans' Health Literature (2016 – 2023).*

Washington, DC: Evidence Synthesis Program, Health Services Research and Development Service, Office of Research and Development, Department of Veterans Affairs. VA ESP Project #09-010; 2024

Questions?

ESP

If you have questions, please contact: **Karen M. Goldstein, MD, MSPH**  
*Co-Director, Durham ESP Center*  
[karen.goldstein@va.gov](mailto:karen.goldstein@va.gov)



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VA



U.S. Department of Veterans Affairs

Veterans Health Administration  
Health Systems Research



Yano et al. Towards a VA Women's Health Research Agenda. JGIM. 2006

Bean Mayberry et al. Systematic Review of VA Women's Health Research: 2004-2008. ESP report. 2010

Danan et al. An Evidence Map of the Women Veterans' Health Literature (2008-2015). ESP report 2017

Pace et al. An Evidence Map of the Women Veterans' Health Literature (2016-2023). ESP report. 2024

Khalil et al. Advancing the methodology of mapping reviews: A scoping review. Research Synthesis Methods. 2024.

Campbell et al. Mapping reviews, scoping reviews, and evidence and gap maps: the same but different – the “Big Picture” review family. Systematic Reviews. 2023



**U.S. Department of Veterans Affairs**

Veterans Health Administration  
Health Systems Research



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# **VA Women Veterans' Evidence Map: *Where do we go from here?***

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**Elizabeth (Becky) Yano, PhD, MSPH**

Director, VA Women's Health Research Network (Consortium)

Director, VA HSR Center for the Study of Healthcare Innovation,  
Implementation & Policy (CSHIIP)

Professor of Medicine & Public Health at UCLA

**November 19<sup>th</sup>, 2024**

# VA Evidence Synthesis Program

- **Seminal evidence reviews in women's health**
  - 1<sup>st</sup> evidence map (2008-15), 1<sup>st</sup> systematic review (2004-08)
  - Women's health centered systematic reviews
    - Prevalence of intimate partner violence among Veterans (2021)
    - Telehealth services designed for women (2017)
    - Non-pharmacologic treatments for menopause-associated vasomotor symptoms (2016)
    - Sex effects in high-impact conditions for women Veterans – depression, diabetes, and chronic pain (2015)
    - Screening pelvic exams in asymptomatic average risk adult women (2013)
    - Health effects of military service on women Veterans (2011)
- **Critically advancing foundations for evidence-based research, evaluation, and improvement**

# Where do we go from here?

- **Volume of relevant literature grown dramatically**
  - Testament to the hard work of a *national Consortium* of VA researchers and operational partners dedicated to using research to improve women Veterans' care
  - Benefited/benefits from systematic strategic planning and communication of VA priorities and women Veteran needs
  - Marked increase in intervention studies → implementation
- **Evidence maps extremely useful tool for gauging agenda progress while also identifying gaps**
  - Allows for assessment of large, diverse literature
  - However, does not provide us with summary of knowledge gained or answers to specific questions

# Where do we go from here?

- ***For last evidence map, WHRN engaged national research work groups on topical systematic reviews***
  - Yielded evidence reviews on reproductive health, substance use disorders, and multimorbidity
  - Yielded assessment of reporting of results by sex or gender in RCTs with women Veteran participants (2019)
  - Also supported previous spinoff systematic review of women Veterans' mental health (2014)
- ***This time, we have even more published articles per topical area, enabling even more systematic reviews***
  - Entire article batch will be shared with WHRN to launch

# Where do we go from here?

- **Topics for which systematic reviews building off of the evidence map may be warranted**
  - General mental health likely too large (k=203) but thematic work (types of mental health) possible
    - k=95 for PTSD; k=57 for OEF/OIF/OND Veterans as a subgroup)
    - Substance use disorders (k=71)
    - Suicide/self-injury (k=55)
    - Reproductive mental health (k=21)
  - Medical conditions
    - Chronic medical conditions (~complexity) (e.g., CVD) (k=137)\
    - IPV (k=121)
    - Updated reproductive health systematic review (k=88)
    - Chronic pain/opioid use (k=30)

# Where do we go from here?

- **Evidence map results already integrated into VA women's health research priority setting**
  - Results shared as part of a VA expert panel among 12 program office leaders to set priorities for next NOSI\*
- **Researchers may leverage the evidence map for stage-setting their own grant proposals**
- **Anticipate this may be the last evidence *map* on women Veterans' research literature**
  - Will work with VA program offices to help generate more specific questions to pose through systematic review

\*NOSI = Notice of Special Interest

# Where do we go from here?

- **WHRN sponsoring several new research work groups (e.g., military exposures, menopause, aging)**
- **Other VA Office of Research & Development and Program Office funded projects ongoing (e.g., VA CSP Women's Enhanced Recruitment Process, COURAGE)**
- **Abundant opportunities to explore differences by sex and gender using existing VA data**
- **Emphasis on moving to intervention, implementation and rigorous program evaluation**



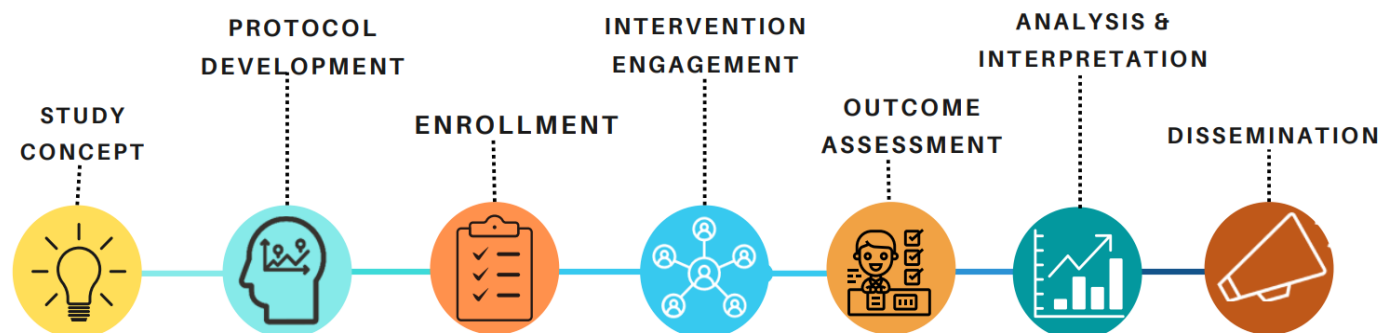
# Introducing the WERP Toolkit

<https://bit.ly/WERPToolKit>

The WERP Toolkit supports research teams in addressing the challenges of recruiting women Veterans into clinical trials. The toolkit provides suggestions for effective strategies for increasing recruitment and retention of women Veterans in VA research, such as:

- ① Staff training resources to support the participation of women Veterans in clinical trials
- ① Suggestions for adjusting recruitment efforts to account for the distinct settings where women receive care within VA.
- ① Tips for tailoring study messaging for women Veterans

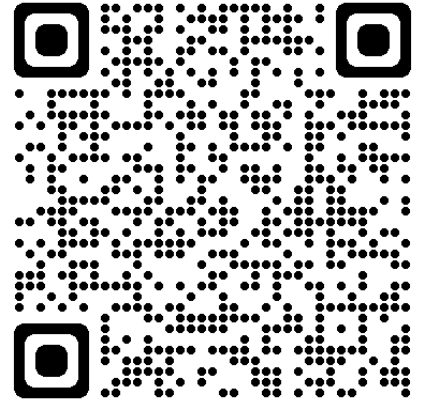
## WHAT PHASE IS YOUR STUDY IN?



*\*Accessible only on the VA network*

Funded by CSP N0011  
(Goldstein/Frayne)

# Get Involved!



- ✓ **Subscribe to the VA WHRN Consortium Group Email:**  
<https://varedcap.rcp.vaec.va.gov/redcap/surveys/?s=CDFTRTNJK79PF4YE>
- ✓ **Contact:** Jessica Friedman, PhD, [Jessica.Friedman@va.gov](mailto:Jessica.Friedman@va.gov) or [whrn@va.gov](mailto:whrn@va.gov) with ideas for future cyberseminars focused on women's health.