



# Perspectives on Chronic Pain in Women Veterans

*HSR&D Spotlight on Pain Management*

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# Overview

## **Part 1**

Unique Risks and Correlates of Pain in Women Veterans

## **Part 2**

Challenges with Pain & Pain Treatment: Perspectives from Women Veterans and the Providers who Treat Them

## **Part 3:**

Special Considerations in Treatment:

Patient/Provider Interactions &

Tailoring Pain Self-Management for Women Veterans

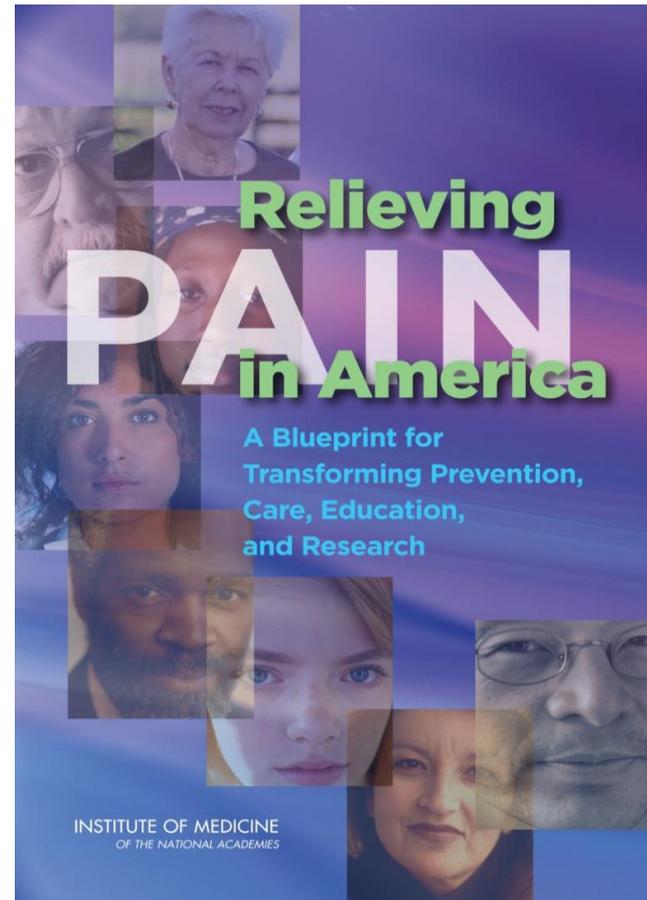


## Part 1:

### Pain in Women: Prevalence, Risks and Correlates

# Why is pain a women's health topic?

- Women report higher prevalence of pain
- Greater pain-related disability
- Greater risk for sub-optimal patient-provider communication and stigma regarding care
  - longer time to dx
- Less likely to receive optimal pain treatment
- More likely to experience adverse medication side effects/complications



# Sex Differences in Pain and Pain Related Disability

- 259 Women, 249 Men
- **Women reported greater pain intensity**
- BPI Severity 6.2 vs. 5.2 (P<.001)
- **Greater pain specific disability**
- BPI interference 6.47 vs. 5.27 (P<.001)
- **More pain related disability days**
- 32.5 vs. 23.4 (P<.001)
- **More likely to acknowledge emotional aspects of pain and expressed a greater need for empathy.**

# Women Veterans with Pain

- Migraine and back pain represent 2 of the top 3 service connected conditions for women Veterans (National Center for Veterans Analysis and Statistics, 2011)
- Relative to male Veterans with musculoskeletal conditions, women are more likely to:
  - Report moderate to severe pain
  - Evidence two or more painful conditions
  - Be diagnosed with fibromyalgia, TMD, neck pain, migraine
  - Carry a diagnosis of depression, and anxiety
  - Have a higher BMI
  - Have experienced an interpersonal trauma

(Higgins, et al, in press; Driscoll, et al, 2015, Weimer, et al, 2013, Haskell, et al, 2009)



# Prevalence and Age-Related Characteristics of Pain in a Sample of Women Veterans Receiving Primary Care

- 213 Women Primary Care Patients
- Mean age 52
- ***78% reported ongoing pain problem***
- Mean duration of pain 6 years
- Average pain intensity 6.3 (range 1-10)
- Commonly endorsed pain sites included:
- Lower extremity (68%), Low back (63%), Shoulder (48%).
- Highest prevalence in age 36-50 (89%), and 51-65(83%)

# Risks for “chronic pain” in Women

she  
wore  
these.

It's **our job** to give **her**  
the best care anywhere.



- High injury rates in basic training and active duty
- Higher prevalence of depression and anxiety
- Combat trauma
- Sexual Trauma –20% screen positive
- Pre-enlistment physical/sexual trauma – 50% screen positive

WOMEN VETERANS HEALTH CARE



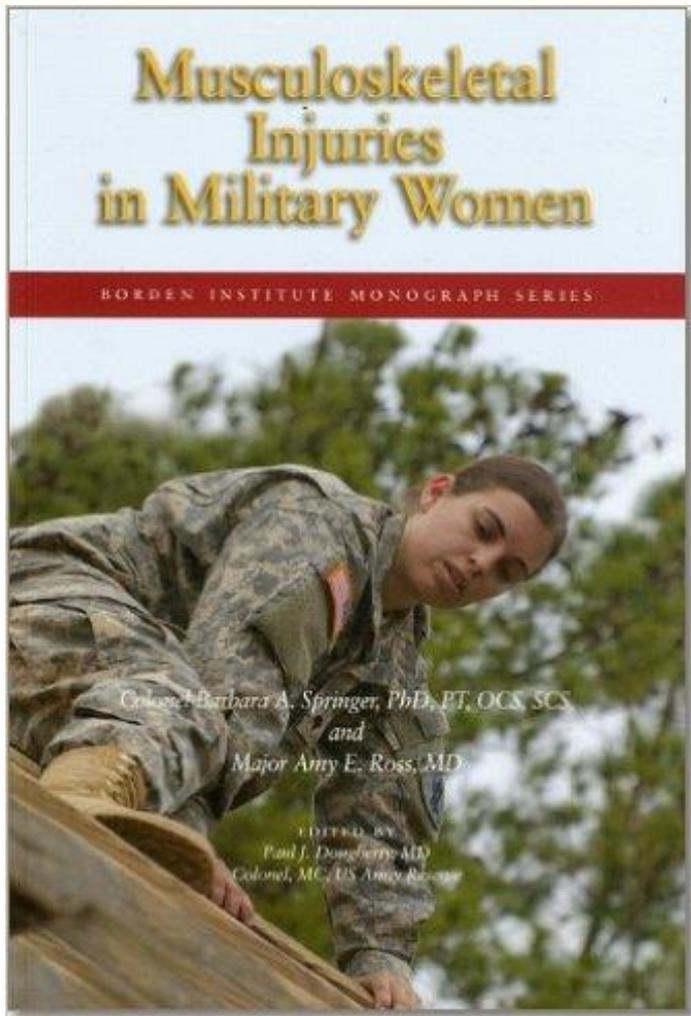
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Maguen et al, Gender differences in mental health diagnoses among Iraq and Afghanistan Veterans enrolled in Veterans Affairs Healthcare. Am J Pub Health 2010; 100(12); 2450-2456.

Skinner K. M., et al., (2000). The prevalence of military sexual assault among female Veterans' Administration outpatients. Journal of Interpersonal Violence, 15, 291-310.

All Veteran Data, OEF/OIF Veteran Data, FY2009  
WVCS

# Military Musculoskeletal Injuries in Women



Being Female is a risk factor for injury in Army basic training programs

- Cumulative injury incidence in BCT was 52% for women versus 26% for men
- 75% of BCT injuries in BCT are “overuse” injuries
  - Repetitive loading on bones, ligaments and muscles

Common Overuse injuries in women

- Stress fractures
- Shin pain
- Patellar Femoral Pain Syndrome
- Patellar or Achilles Tendonitis
- ITB Friction Syndrome

*Slide courtesy of Jamie Clinton-Lott, APRN*

# Etiology of Common Traumatic Injuries in Women

- The combination of anatomy and physiology appears to predispose women to a higher risk of pelvic stress fracture and anterior cruciate ligament (ACL) tears.
  - The diagnosis of pelvic stress fracture has been reported as 1 in 367 female recruits, compared with 1 in 40,000 male recruits
  - The rates of ACL ruptures for female athletes range from 2.4- 9.7 times higher than in male athletes

# Depression and Risks for Chronic Pain

- Depression is almost twice as common in women compared to men.
- Pain and depression frequently co-exist (30-50% co-occurrence) and have additive effect on adverse health outcomes and treatment responsiveness of one another \*
- The presence of depressive symptoms is a strong, independent, and highly prevalent risk factor for the occurrence of disabling back pain \*\*
- Women with pain, relative to men, report greater disability in the context of depression \*\*\*

\*Bair, MJ, Robinson RL, Katon W, Kroenke K. Depression and Pain Co-morbidity: a literature review. Arch Intern Med 2003;163:2433-2455

\*\* Reid MC, Depressive symptoms as a risk factor for disabling back pain Am Geriatr Soc. 2000 Dec;51(12):1710-7.

\*\*\*Keogh, et al. Gender moderates the association between depression and disability in chronic pain patients. European J Pain. 2006 10:5;413.

# Sexual Trauma and Pain

- Sexual trauma and resulting PTSD strongly correlated with and predictive of pain
- MST, in particular, is associated with increased prevalence of pain ( IBS, pelvic pain, back pain, joint pain, FMS, abdominal pain, and HA) and presence of more than one pain dx (Frayne et al, 1999; Cichowski, et al, 2017)
  - » In one sample, over half of women veterans reporting MST screened positive for FMS (D'Aoust, et al., 2017)
- Previous trauma is associated with greater pain intensity and/or pain interference (Haskell, et al, 2009; Driscoll, et al 2015)
- Self-reported trauma exposure is, in fact, associated with heightened pain sensitivity in CLBP patients (Tesarz, et al, 2015)



## Part 2:

### Challenges with Pain & Pain Treatment

# The Burden of Chronic Pain Among Women

## ***Functional Limitations***

- Physical functioning\*
- Ability to perform activities of daily living
- Sleep disturbances
- Recreation
- Work

## ***Psychological Morbidity***

- Depression\*
- Anxiety\*
- Anger
- Loss of self-esteem
- Guilt/Shame

## ***Social Consequences***

- Marital/family relations \*
- Intimacy/sexual activity
- Social isolation
- Role losses
- Stigma\*

## ***Socioeconomic Consequences***

- Healthcare costs
- Disability
- Lost workdays\*

# Relational Burden

- Relational factors have been understudied in pain
- Preliminary research suggests:
  - Relationship factors significantly impact pain management self-care
    - Guilt/fear about how pain affects others (> w)
    - Limit setting capacity (>w)
    - Impact of pain on relationships
  - Significant sex differences suggest women report greater relational impact on their ability to manage pain
  - Women exhibit poorer pacing and push themselves to greater pain severity in an effort to maintain responsibilities

(Darnall, et al, Arch Int Med, 2012)

# Challenges with Pain Treatment



- Women may be less likely to be queried about pain at medical appointments
- Women face challenges in pain treatment such as stigmatization, misdiagnosis, improper/unproven treatments and misunderstanding especially in context of pain conditions that are sex-linked, poorly understood, or of unknown etiology
  - Overemphasis on biological cause of pain discounts experience
  - Receive less aggressive treatment
- Women Veterans may respond differently to interdisciplinary pain treatment programs
- Women Veterans report 38% less satisfaction with pain treatment

Goulet, et al, Medical Care 2013; 51:3; 245-250

Campaign to end chronic pain in women. Chronic pain in women: Neglect, dismissal and discrimination. 2010

Bartley, et al, Sex differences in pain : A brief review of clinical and experimental findings. B J of Anaesthesia. 2013: 111:1;

Murphy, et al, Sex differences between Veterans participating in interdisciplinary chronic pain rehabilitation,. JRRD. 2016; Edmond, et al, APS abstract, May 2017 LaChappelle, et al, APS abstract, May 2014.

# Challenges with Pain Treatment

- Women communicate differently with healthcare providers about pain
  - W: seek care earlier and more often; tend to describe their pain by including contextual information, express emotions
    - Reports more likely to be discounted
  - M: more likely to wait until pain threatens to interfere with work duties to seek tx (tend to report more objective symptoms/functional sx's)
    - Reports taken more seriously



# Gender Differences In Care Among Veterans with Chronic Pain

- Women Veterans with pain utilize more care than their male counterparts
  - 36% higher rate of visits to primary care (Kaur, et al, 2007)
  - 40% higher rates of ER care for pain related complaints (Weimer et al, 2013)
  - 18% higher rates of PT (Weimer et al, 2013)
  - 37% less satisfaction with their care (LaChappelle, et al)
- Women Veterans with pain are:
  - Less likely to receive an opioid (Weimer et al, 2013; Macey et al, 2011)
    - Unclear whether preference or disparity
  - More likely to receive guideline concordant opioid care (Oliva, 2014)
  - More likely to receive risky co-prescriptions (Oliva, 2014)

# *“The default (pain) patient is assumed to be male”*

Qualitative Investigation designed to assess gender differences in pain and pain care in Veterans using VA Healthcare

- Unique observations emerged for women:
  - Described more pain interference, multiple intersecting pain conditions
  - Expressed greater interest in CIH; *but were less aware of options*
  - Greater reticence to use medications in setting of multi-morbidities because of SE
  - *“Default patient is assumed to be male”*
    - General lack of socialization to women and their needs, perceived gender bias
      - Preference for “women” specific services to address pain (e.g. weight, aquatic therapy)
    - Issued assistive devices/equipment (e.g. foot brace) tailored for males (e.g. sizes)

Stigmatization . . .

Weight bias. . .

I know I am morbidly obese. Now, let's talk about my pain.

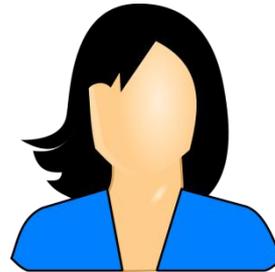
He says it's all in my head. Go to mental health.

Reluctance to ask for options . . .

I think it's drilled into us from basic training. You don't want to bother anybody; you don't want to stand out. Do enough of that in the military

Feeling heard . . .

Just because something doesn't work shouldn't mean you are not satisfied with the care and treatment you are getting



Complexity resulting in feeling as if pain is not well addressed. . .

My provider is baffled by me and my pain.

# Veteran Preferences

- 484 Women Veteran stakeholders surveyed about priorities for mental health care. Key priorities included targeted **mental health** treatment to address:
  - Depression
  - **Pain**
  - Coping with general medical conditions
  - Sleep problems
  - Weight management
  - PTSD

*\*\*Substantial proportions of women endorsed need for specialized, gender specific services for each\*\**

(Kimerling, et al, 2015)

# Provider Perspectives: Caring for Women Veterans with Chronic Pain



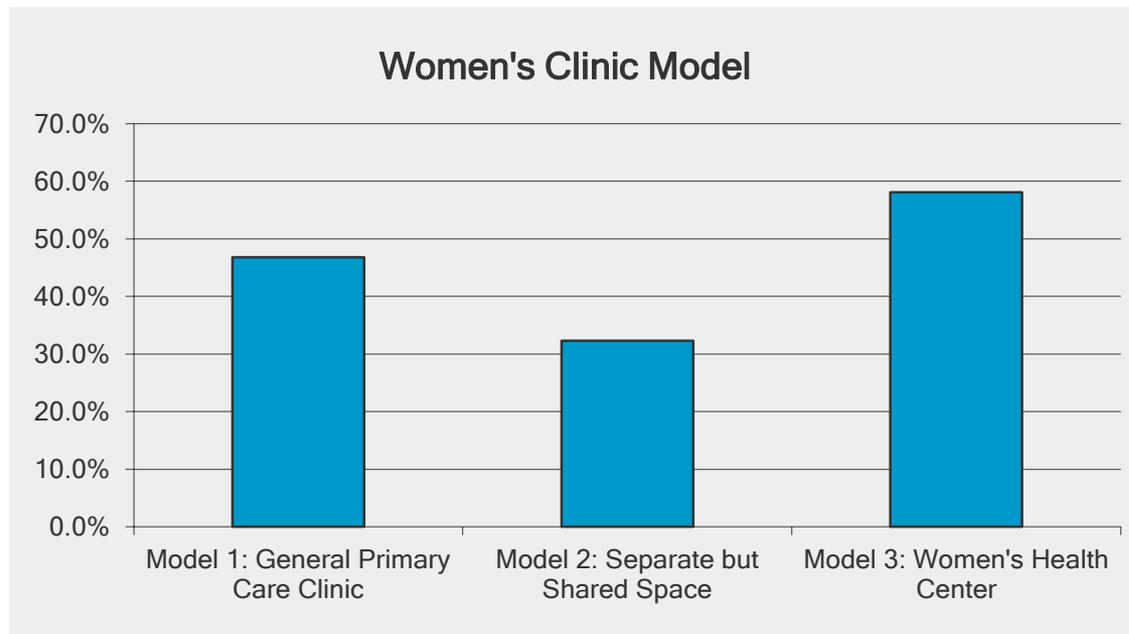
# Women's Health Services: Survey of Barriers to Optimal Pain Care

- 24 item quantitative survey
- Administered via Survey Monkey
  - Email request from Dr. Haskell to all WMDs
  - Request and survey link included in the Roundup

*“Women's Health Services, would like to understand more about pain care resources available to women Veterans, along with common barriers and facilitators VA providers experience when delivering pain care to women. These results will help inform development of future educational, clinical and policy initiatives to optimize the care of women Veterans with pain.”*

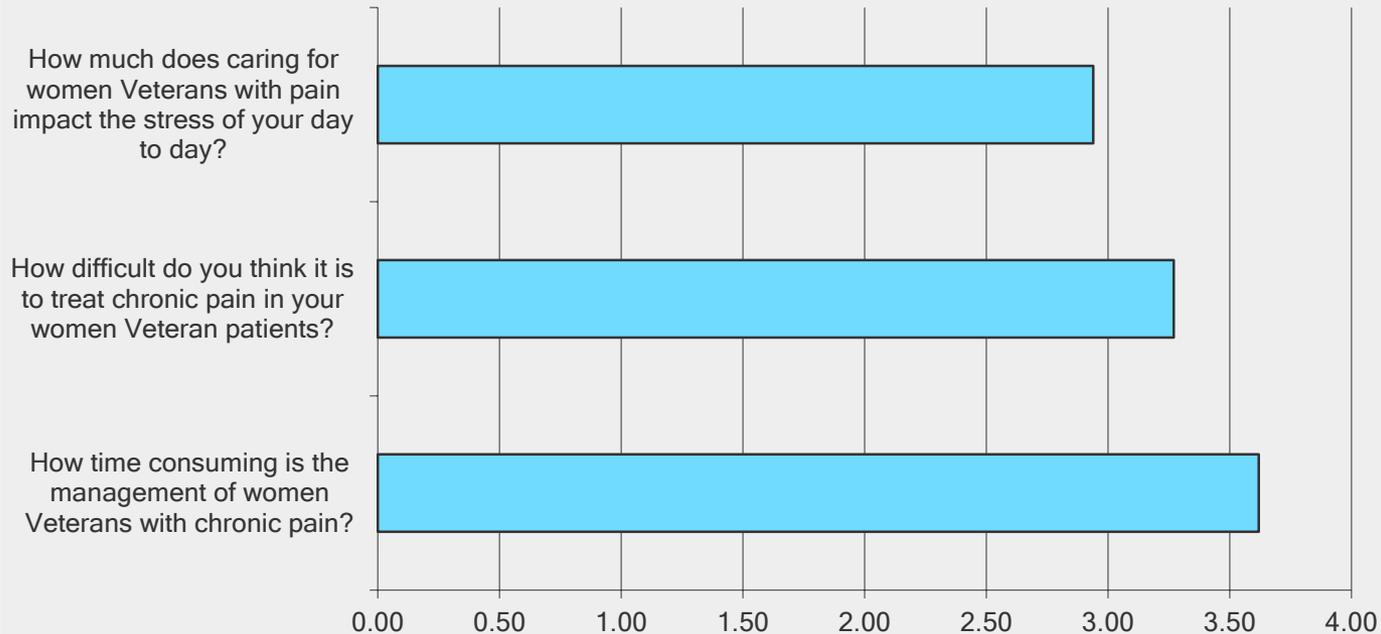
# Respondent Demographics

- 62 Respondents
  - 75% WHMDs
  - 25% Other (DWHP, WVPM, clinical champion)



# Burden of Caring for Women Veterans with Pain

Thinking about the care you provide to women Veterans with chronic pain, please answer the following questions:



# Identified Barriers:

- Medication
  - Over 50% cited prescribing and formulary restrictions as barriers to optimizing care
  - 73% were concerned about drug interactions and risky co-prescriptions in women with pain
- Logistics
  - 74% reported not enough access to specialists with expertise in pain concerns specific to women
  - 69% felt women are turfed back to PC following referrals
  - 80% felt there were not enough CIH options for women
- Time
  - 96% reported that women with pain require longer visits and that they required extensive non-visit effort
- Knowledge
  - 64% reported uncertainty about tx options in setting of multimorbidities

# If available, how likely would you and your staff be to utilize the following resources to optimize pain care for women Veterans?

Service	Rating (0-4)
Pain Resource Specialist	3.27
APRN for opioid refills	3.38
Co-located PT	3.55
Co-located Interventional Pain Services	3.25
Co-located Health Psychologist	3.69
Co-located Multidisciplinary Pain Clinic	3.62
Multidisciplinary Consultation Team	3.69
CIH for women (e.g. yoga for women)	3.64
E-consults to specialists in gender specific pain care	2.98
Provider Toolkits accessible via Sharepoint	2.35
Designated time and support to conduct SMAs for pain	2.78
Peer Support Program for Pain	3.00

The following is a list of problems or experiences that may interfere with women Veterans' ability to manage their pain or to engage with pain care recommended by their provider. Please rate the extent to which you feel each of these complicates the care of chronic pain in women Veterans:

Service	Rating (0-4)
Mental Health Concerns	<b>3.86</b>
Interpersonal Distress/Unstable Relationships	<b>3.76</b>
Lack of Adequate Social Support	<b>3.67</b>
History of Sexual or Physical Trauma	<b>3.80</b>
History of Combat Trauma	3.49
Caregiving Responsibilities/Relational Burden	3.49
Financial Concerns/Limited Resources	3.45
Homelessness	3.39
Limited Transportation	3.35
Lacking Someone to help them be compliant with recs	3.16

*\*58% of respondents reported that they were not confident in their ability to manage pain in women Veterans with substance abuse or mental health problems*

## *What the providers say . . .*

Women Veterans are less likely to use our mixed gender (pain) resources.

Women need more services for pain due to more associated *mental health problems*.

Some women put the needs of others ahead of their own . . . which leads to intensification of symptoms.



Women tend to prefer CIH care more than men.

Trust issues are more pronounced, likely due to MST and past failures of DoD and VA.

In general, Women appear to have more *social stressors* which impact their pain.

Many (women's) PCMH staff have not been trained in, or do not offer CBT-CP.



## Part 3:

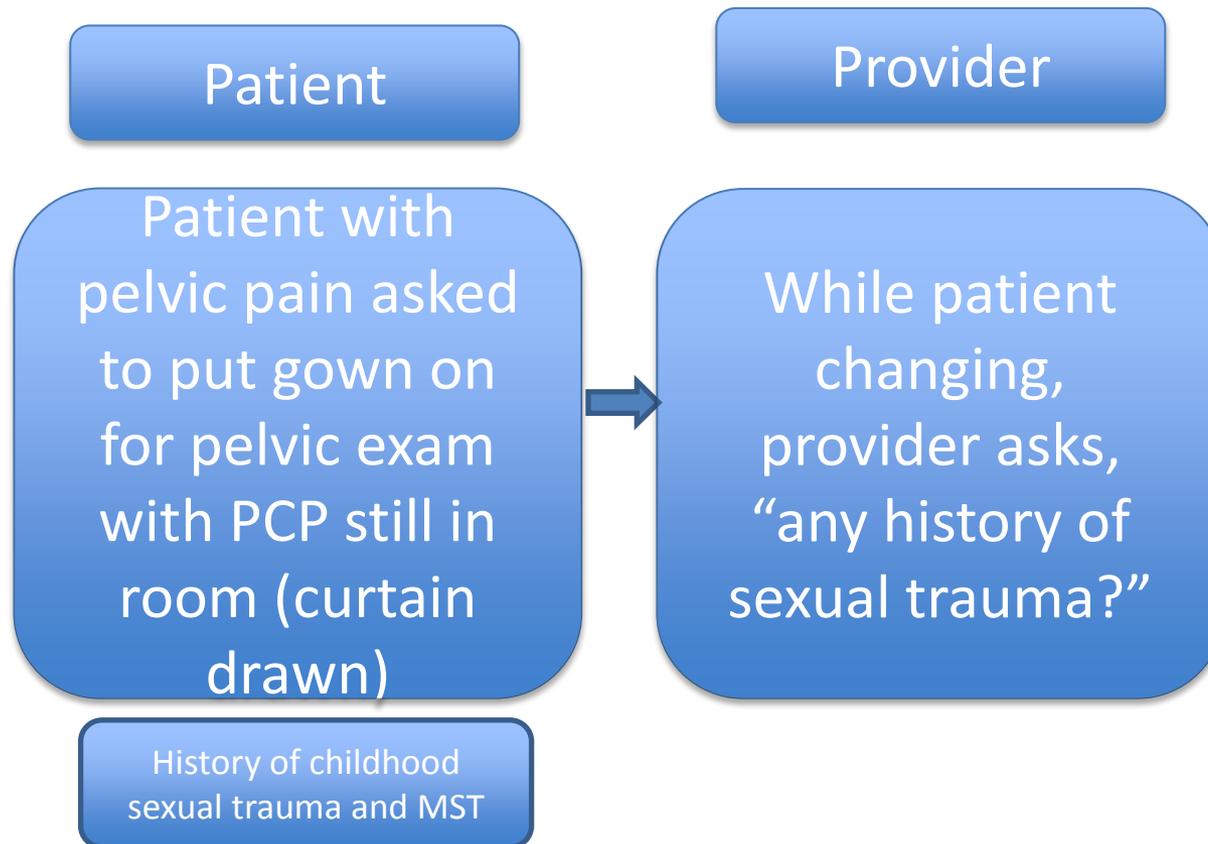
Special Considerations in Treatment:  
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Tailoring Pain Self-Management for Women Veterans

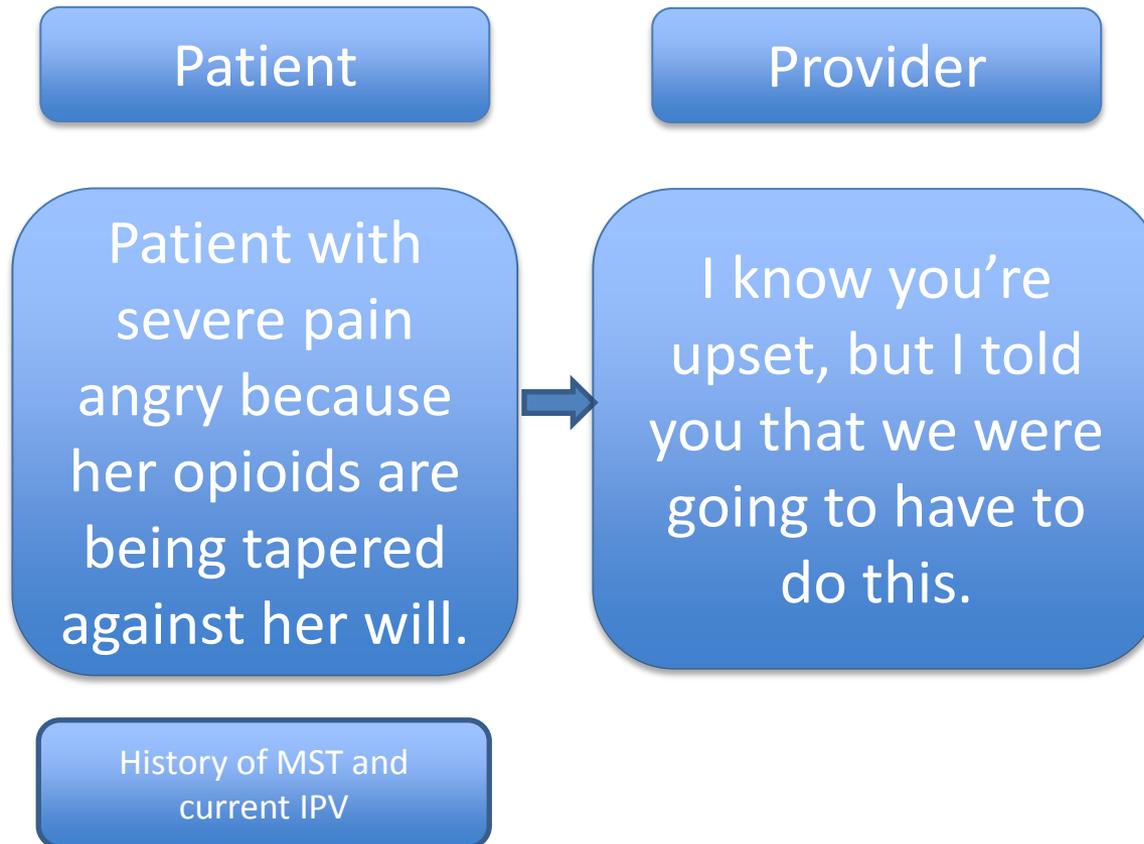
# The Importance of Trauma Informed Care

- Given the high prevalence of sexual abuse in the female population and its demonstrated association with chronic pain, assume that any woman with pain could have a history of sexual abuse and practice *trauma informed care*
- This means that you assume every patient may have a history of prior trauma and treat all of your patients as if they do have that history
  - “*at its core, TIC is good patient-centered care*” (Machtiger, et al, 2015)

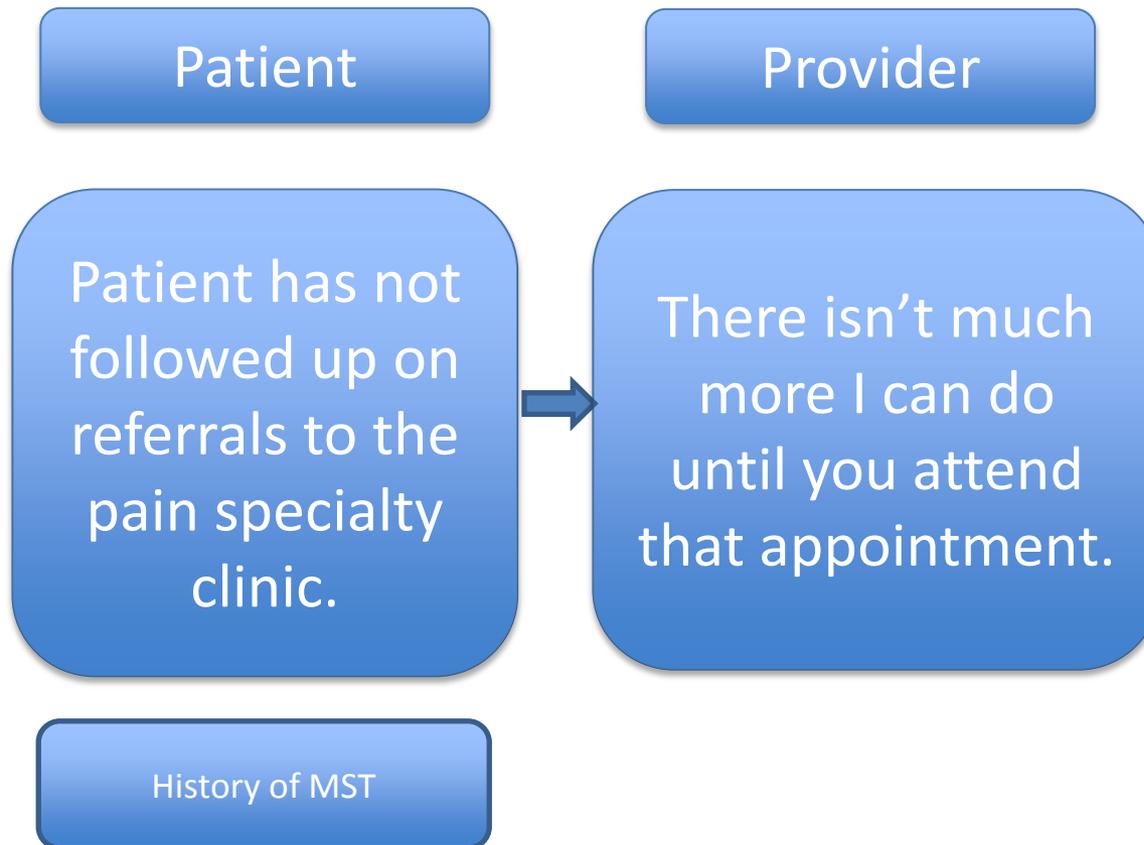
# Trauma Insensitive Care: Jackie



# Trauma Insensitive Care: Marissa



# Trauma Insensitive Care: Bernice



# Traditional vs Trauma Informed Paradigm

Traditional	Trauma Informed
What is wrong with you?	What happened to you?
This person is being manipulative.	They are trying to get their needs met.
They want attention	They are trying to connect the best way they can.
They have poor coping skills	They have survival skills that helped at one time, but these are no longer serving them
I shouldn't mention trauma or it will upset them.	Talking about the trauma can be normalizing (especially if they know past traumas exacerbate pain)

# Principles of Trauma Informed Care

- Core principles inform the clinical environment, clinical activities and relationships
  - Safety: Physical and Emotional
  - Trustworthiness and Transparency: communicate what to expect, check in with patient.
  - Collaboration & Mutuality: Emphasis on partnering with the patient, leveling of power differences between staff and patients
  - Choice: Promote patient choice and control
  - Empowerment

(SAMHSA, 2014)

# How the Approach Changes with TIC

Survivor Behavior	Traditional Attribution	Trauma Informed Attribution
Gets angry easily.	Is being manipulative. She wants what she wants.	Understand fear often underlies anger. Ask what is scaring her.
Does not want to follow-through with referral or has excuses for why she hasn't.	Is being difficult. Not invested in care. Doesn't care enough to get better.	May fear for her safety (e.g. referral to mixed gender setting, unfamiliar provider).
Comes in for every ache and pain.	Is drug seeking or a hypochondriac.	Needs regular reassurance from someone she trusts.
Acts uninterested or does not engage in care.	Doesn't care. Stubborn.	May be triggered in appts. Feels overwhelmed and keeps to self.

# Trauma-informed care checklist

- Knock before entering room
- Ask permission before touching during physical exam
- Sit at eye level with patient
- Give the patient the option of where to sit in the exam room
- Support patient control, choice, and autonomy in medical recommendations
- Ask questions about mental health sensitively and appropriately
- Ask about the nature of past trauma history sensitively and appropriately
- Respond sensitively to disclosure of trauma history (if applicable)
- Ask about intimate partner violence sensitively and appropriately
- Respond sensitively to disclosure of intimate partner violence (if applicable)

# Trauma Informed Care

Open your questioning with a statement like:

*“ We know that many people have experienced significant traumas in their lifetime and sometimes those traumas affect your health, since I am your medical provider I routinely ask all of my patients about any history of sexual abuse. Have you ever experienced this type of trauma?”*

# Trauma Sensitive Care: Jackie

History of childhood sexual trauma and MST

Provider

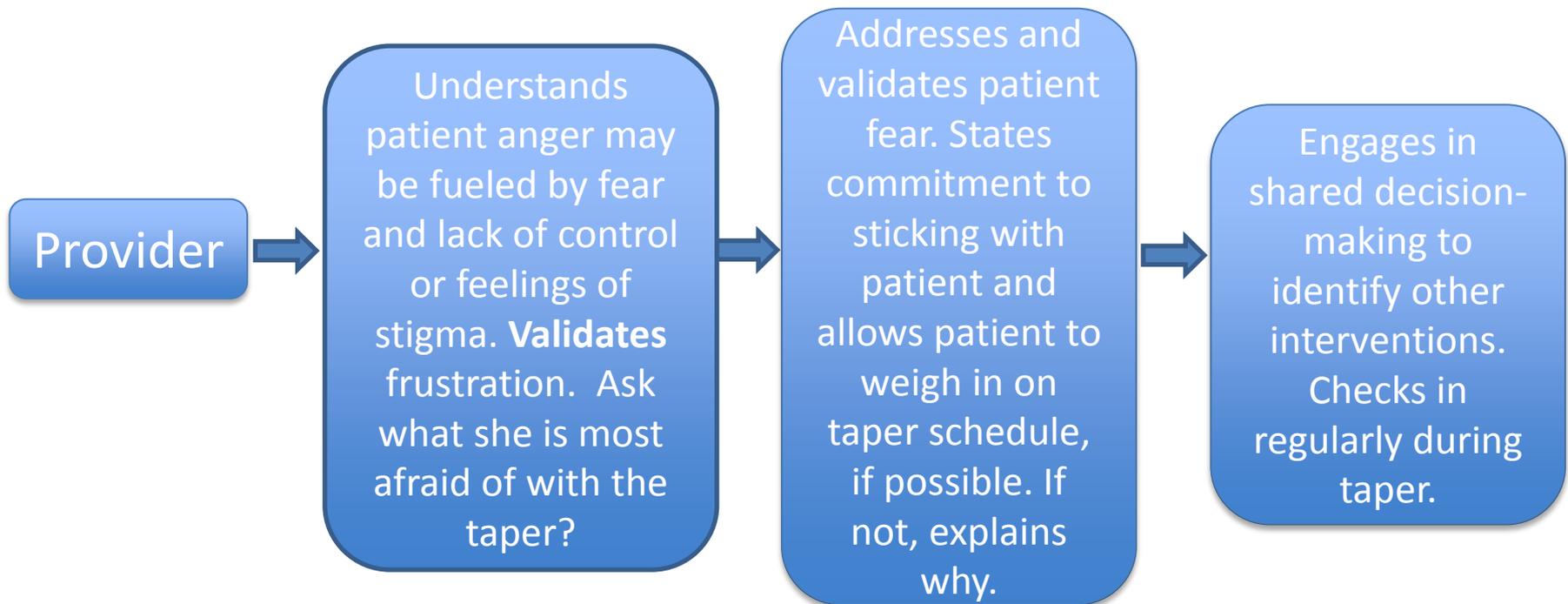
Sensitively inquires about trauma. Validates how difficult it can be to talk about it and thanks her for sharing. Asks how he/she can help patient to be more comfortable with the exam.

“I am going to step out while you change and I’ll knock before I come in.”

Walks patient through exam so she knows what to expect. Let’s her know she will stop at any time if patient needs it. Checks in during exam to see how she is doing.

# Trauma Sensitive Care: Marissa

## History of MST and current IPV



# Trauma Sensitive Care: Bernice

## History of MST

Provider

Acknowledges patient refusal may be out of fear. Asks what is making it difficult to attend the appointment. Ask if there is anything that would make it easier/more comfortable for her to attend?

If she still does not wish to go, respects that choice. Works with her to identify something she would be willing to do for pain.

Lets her know she can ask for the consult at any time in the future if she changes her mind.

# Trauma Informed Care

- Be aware that the patient may have real trust issues and that the provider may have to earn their trust; this may be a barrier to optimal pain care.
- Be aware that many times patients may not be ready to disclose this type of information or if they do disclose, they may not be ready to do more about it, that's ok.
- Every woman with pain should be approached as if she has a trauma history (even if they previously denied)

# How to sensitively engage with women Veterans about pain?

- **Remember, the pain is often a symptom of lots of bad things in her life!**
- **Empathize:**
  - *“You’ve seen a lot of specialists and you’re still in pain. It’s only natural that you feel frustrated and maybe even a little helpless.”*
  - *“Of course you are upset! You have a lot of responsibilities and the pain is making it hard for you to function.”*
  - *“It’s not uncommon for pain to interfere in many of the domains you are describing: sleep, functioning, mood, even relationships.”*

# Assess & Reflect

## Formal

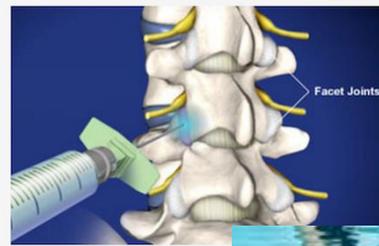
- Intensity/Interference
  - Brief Pain Inventory (10 items)
  - West Haven-Yale Multidimensional Pain Inventory
  - PEG-3
- Beliefs About Pain
  - Pain Catastrophizing Scale
- Mood
  - Beck Depression Inventory
  - Patient Health Questionnaire-9

## Informal

- Triggers/Alleviators
  - What makes your pain better?
  - What makes it worse?
- **Function**
  - How does pain interfere in your life? What does it keep you from doing?
  - If things were better in 6 months, what would you be doing that you are not doing now?
- Interconnection of Pain and MH
  - How does your mood affect pain?
  - How does pain affect your mood?



# Promote Non-Pharmacological Pain Self-Management



Explore the many ways to manage pain

Yoga and meditation have helped me.

Talk to your provider about treatment options.



**WOMEN VETERANS HEALTH CARE**  
Learn more at [www.womenshealth.va.gov](http://www.womenshealth.va.gov)



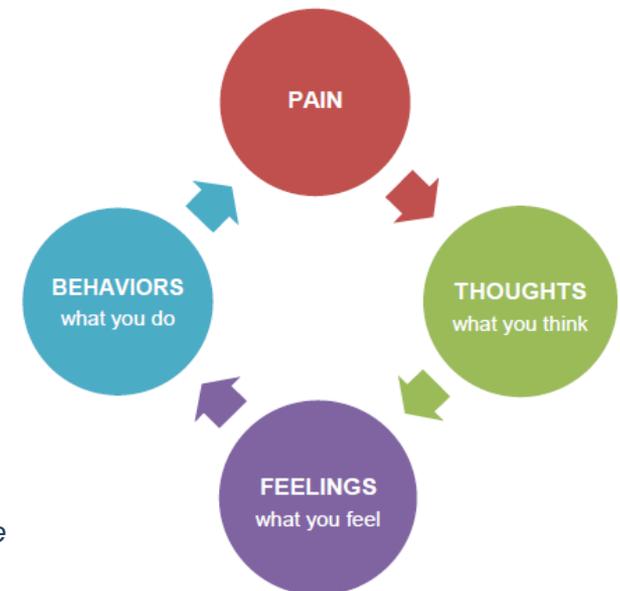
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# Pain Self-Management

The promotion of patient pain self-management has emerged as a national priority, both within and outside of VA both as a means to improve clinical outcomes and to reduce reliance on risky interventions and medications.

Cognitive Behavioral Therapy for Chronic Pain (CBT-CP) has emerged as the gold standard for pain self-management



Department of Health and Human Services, *National Pain Strategy: A comprehensive population health-level strategy for pain*. 2016; Committee, I.P.R.C., *Federal Pain Research Strategy*. 2017; Williams, et al., 2012; Hoffman, et al., 2007

# Factors Influencing Widespread Adoption of CBT-CP

## Logistical Factors

- CBT-CP time intensive; requires frequent visits
- *WV: Travel/Transportation, Competing Demands*

## Healthcare Delivery System Factors

- CBT-CP resource intensive; requires specially trained providers
- *WV: Access to gender-specific care, perception VA providers not sensitive to gender-specific factors, sexual trauma*

## Social Factors

- CBT-CP optimized by support; prompts engagement/adherence
- *WV: Less social support, more relational demands*

*(Washington, et al, 2011; Kimerling, et al., 2015; Bair, et al, 2009; Kerns, et al., 2002)*



Tailors an existing evidence-based CBT-CP self-management program for women Veterans and combines it with *reciprocal peer support*

- Peers meet for a 2 hour orientation with PC nurse where they receive self-management materials and learn how to be a peer
- They then exchange daily texts and 1 brief weekly call to support each other as they:
  - participate in a graduated walking program
  - learn and practice pain coping skills
  - set meaningful activity goals

*Supported by:*

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# Addressing Barriers to Pain Self-Management in Women Veterans

## **Logistical Barrier**

Distance/Time/Transportation

## **CONNECT Component**

Home/Telephone Based Treatment

## **Healthcare Delivery Barriers**

Availability of CBT-CP Provider  
Gender-Sensitive Care

WHC PACT nurse check-ins

## **Psychosocial Barriers**

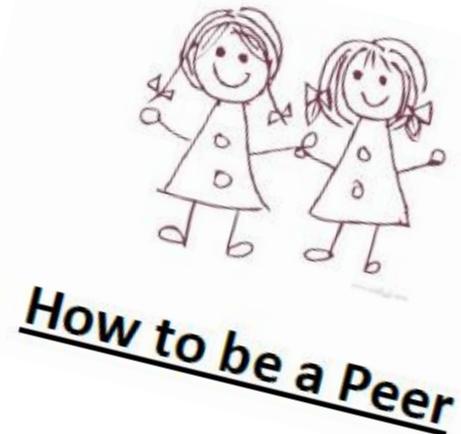
Limited Social Support

Daily peer texts and weekly calls to reduce isolation and promote adherence to self-monitoring, and pain self-management through reinforcement  
Module content to emphasize social support

Relational Burden

Peer validation to prioritize self-care  
Module content to encourage limit setting

# Project CONNECT: Qualitative Pre-Pilot: Feasibility/Acceptability of Materials



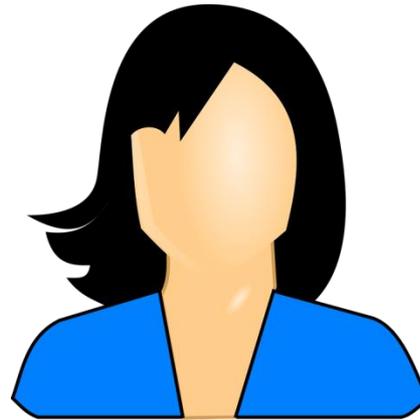
## Daily Text Messages

**Each day**, you and your peer partner are asked to send and receive no more than **2 brief text messages**. These messages should:

- Ask some form of the following question, "*What is one thing you did today to care for your pain?*"
- Provide positive reinforcement or supportive statements, depending on her response to the question above.
- Encourage your partner to identify one thing she plans to do to care for her pain the following day.

## *Pre-Pilot Feedback...*

Fantastic idea – it could work because it would be helpful to have someone to reach out to.



When you have pain, you back up into yourself and you're not sociable anymore; this helps you get going again – piece by piece, over time.

It's an opportunity to help others and yourself.

# Project CONNECT: Pilot



## Feasibility/Acceptability of Intervention

- Target 15 Dyads
- Recruitment ongoing

## Lessons Learned

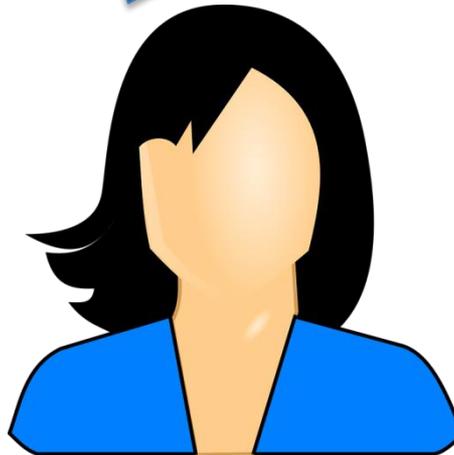
- In-person Orientation Hardship
- Varied levels of Functioning makes pairing challenging
- Unexpected interpersonal stressors (e.g. deaths) and life stressors (illness) interrupt momentum
- More concentrated peer interactions up front, less with time

## *What the participants are saying . . .*

As far as my pain, I felt I was successful. I increased my mobility - I went from 2500 steps / day to 10k steps at least 4 days/wk. Before, I would struggle with my pain 5 or 6 days/per week but that's not true anymore.

Women need this kind of connectivity.

It's good to have an accountability partner because it's important to know you're not alone – it helps to alleviate the depression that comes with pain.



The fact that we were both Veterans helped.

My peer would boost me to walk. . . And breathe.

I learned how to deal with my pain through my brain

If I had a better matched peer I definitely would have paid more attention.

Being there for someone else made me more positive than I would normally be so I would say it helped my mood.

## Overall Summary I.

- Higher prevalence of pain and greater disability observed among women
- Distinct risk factors associated with pain in women
- Women with pain carry unique burdens and have unique treatment needs relative to their male counterparts

## Overall Summary II.

- Treatment may be complicated by communication styles, mental health comorbidities
  - Need to alter approaches
  - Practice trauma informed care
- Efforts to engage women in pain self management activities must be tailored to address specific circumstances

# Acknowledgements

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*VACHS*

# Questions?

