

## Promoting Patient-Centered Family Planning Care Through a Novel Web-Based Decision Support Tool

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## Outline

- ➤ Background: Women Veterans' reproductive health status & gaps in VA care
- ➤ CDA and MyPath intervention overview, including theoretical and conceptual frameworks
- MyPath development process and preliminary usability findings
- ➤ Conclusions and next steps

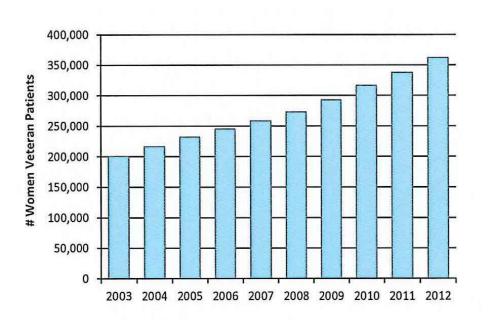
## Poll question #1

What is your primary role in VA?

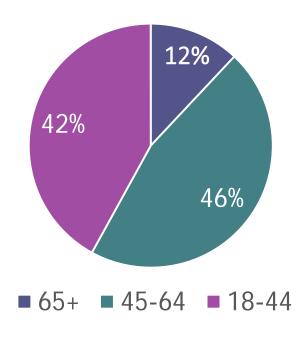
- a) VA researcher
- b) Non-VA researcher
- c) Clinician
- d) Management/operations
- e) Other

# Women Veterans are the fastest growing population of new VA users

Number of women Veteran VHA patients in each year, FY03-FY12



Age distribution among women Veteran VHA patients, FY12



# Who are reproductive-aged women Veterans?

- Multiple risk factors for adverse reproductive-health outcomes
  - Disproportionately from lower income strata and high prevalence of homelessness
  - Disproportionately from racial/ethnic minority groups
  - High medical disease burden (e.g. obesity & chronic pain)
  - High psychiatric disease burden (e.g. depression & PTSD)
  - High prevalence of sexual assault histories

# Reproductive health status of women Veterans



#### UNINTENDED PREGNANCY

- Examining Contraceptive Use and Unmet Need (ECUUN study, PI Borrero, VA IIR 12-124)
  - ➤ Cross-sectional, telephone-based survey of 2302 women Veterans to assess reproductive outcomes and factors affecting reproductive health risks
- ➤ Key finding: 1/3 of pregnancies among women Veterans are unintended, similar to age-adjusted general population *despite* increased access to care through VA

# Reproductive health status of women Veterans



#### PREGNANCY OUTCOMES

- ➤ Veterans have higher incidence of gestational diabetes (40% increase) and pre-eclampsia (30% increase)
- ➤ Possible increased risk of preterm birth
  - > Established risk factors minority race/ethnicity, low SES
  - ➤ Novel risk factors PTSD and recent deployment

# Recommendations to address unintended pregnancy and poor pregnancy outcomes

- CDC and OPA advocate comprehensive family planning care services including:
  - Reproductive goals assessment
  - Contraceptive care to enable women to prevent unwanted pregnancies
  - Preconception care to help women optimize medical and mental health prior to pregnancy
  - Patient-centered approach





Gavin: MMWR 2014

# ECUUN data on gaps and opportunities for improvement



- Nearly 30% of women Veterans at risk of unintended pregnancy not using effective contraception
  - Contraceptive and reproductive health knowledge low
- Over 1/3 of Veterans disagreed that VA providers offered key elements of patient-centered contraceptive counseling
- Fewer than half of Veterans considering pregnancy received any preconception counseling

# Interventions to improve family planning services?

### Reproductive Life Planning

- Do you have any children now?
- Do you want to have (more) children?
- How many (more) children would you like to have and when?





Johnson: AJOG 2006

## Poll question #2

What percentage of women report ambivalent feelings about becoming pregnant?

- a) 5-10%
- b) 10-20%
- c) 20-30%
- d) 30-40%

# Is "reproductive life planning" a meaningful concept for all women?



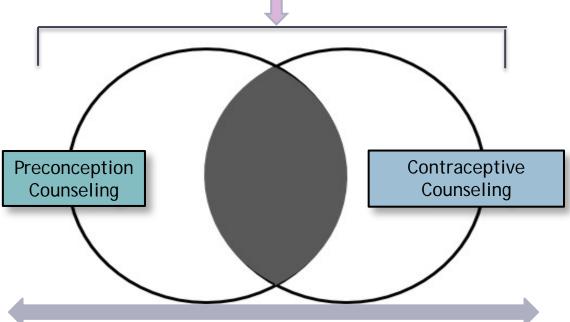
- ➤ As many as 30-40% of women experience ambivalent feelings about potential pregnancy that make defining a plan difficult
- Some low-income women may not see pregnancy planning as achievable (relationship/financial security "pre-requirements" are elusive)
- Pregnancy planning may not be valued by all women
- ➤ Unintended pregnancies may be happy, welcome events

Borrero: Contraception 2015; Aiken: Perspect Sex Reprod Health, 2016; Callegari: AJOG 2017

## Patient-Centered Family Planning Care



Reproductive Goals Assessment



Women who desire pregnancy now

Women who do not desire pregnancy now and are open to preconception counseling

Women who do not desire pregnancy now and are not open to preconception counseling

Callegari: AJOG 2017

### **CDA Aims**

➤ To develop & test a patient-facing, patient-centered web-based decision support tool to improve quality of family planning services in VA primary care and reproductive outcomes among women Veterans

#### > Specific Aims

- 1. To determine Veterans' and providers' family planning decision support preferences and needs
- 2. To develop and pilot test a patient-facing web-based family planning tool ("MyPath")
- 3. To test the effect of the tool compared to usual care in a randomized controlled trial

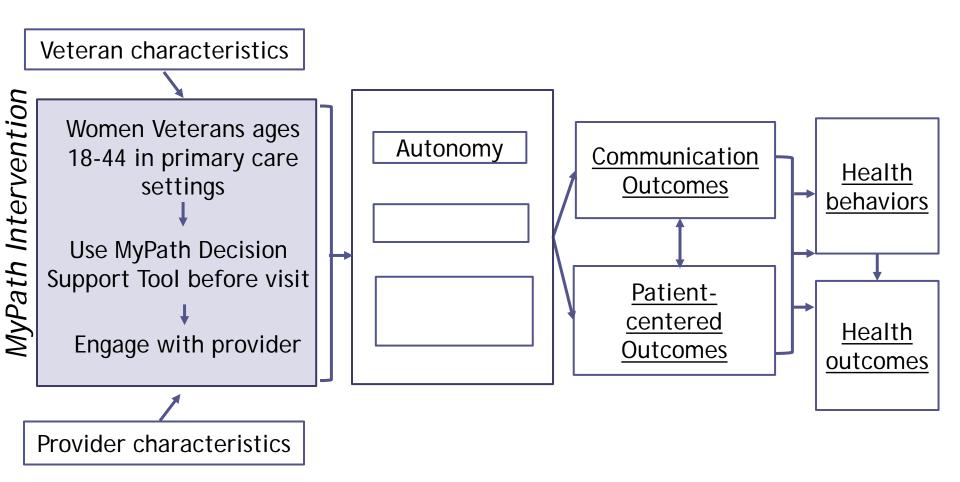
## Theoretical Framework: Self-determination Theory in Health

Patients' motivation is determined by whether their psychological needs are met:



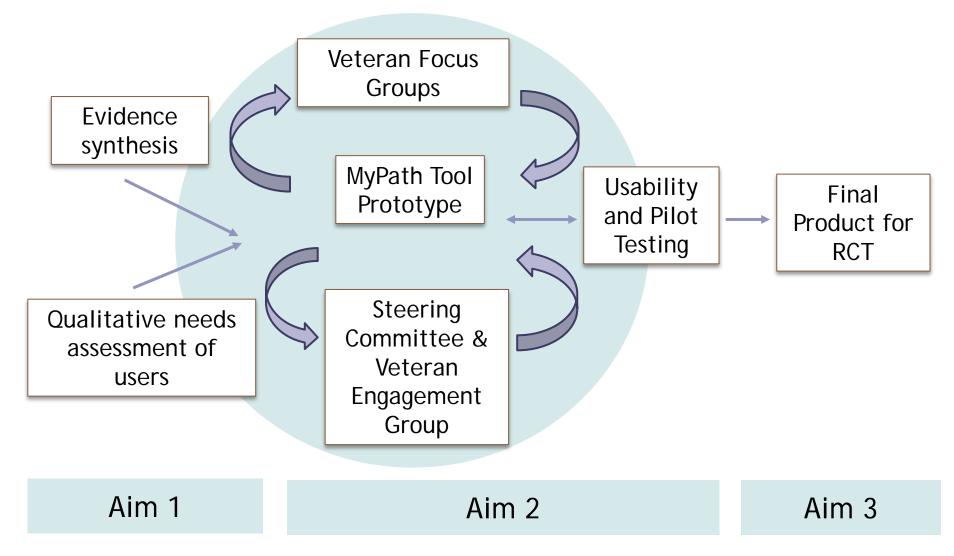
- Autonomy
  - Perception of being the origin of one's own behavior, behaviors align with central values
- Competence
  - Confidence & self-efficacy to achieve change through having necessary skills & tools
- Relatedness
  - Being respected, understood & cared for by provider; trust & connectedness to support behavior change

## MyPath Conceptual Model



Adapted from Self Determination Model of Health Behavior (Ryan, Patrick, Deci, and Williams 2008) and Patient-Centered Care Model (Epstein and Street 2007)

## MyPath Tool Development Framework



International Patient Decision Aid Standards, https://decisionaid.ohri.ca/odsf.html

# Aim 1: Qualitative studies of Veterans' & Primary Care Providers (PCPs)' Needs

### **Objectives**

- 1. What are Veterans' and PCPs' experiences of receiving or delivering family planning counseling and care?
- 2. What are Veterans' and PCPs' preferences and needs related to family planning counseling and care?

## Aim 1: Qualitative Veteran study

➤ Study population: Women Veterans ages 18-44 w/primary care visit at VA Puget Sound or Pittsburgh in past year

#### > Methods

- Recruitment by mail, oversampled racial/ethnic minorities
- ➤ Semi-structured qualitative telephone interviews 2/16-5/16
- ➤ Open-ended questions about experiences with reproductive health care in military/VA and preferences for care
- Recruitment continued until thematic saturation reached

#### ➤ Analysis

- Transcripts analyzed using deductive and inductive content analysis and identified key themes
- ➤ Variation in themes by race/ethnicity

## Veteran Sample Characteristics

	Total sample N=32
Puget Sound	66%
Mean age (SD)	35 (6)
Race NH White NH Black Hispanic Asian	47% 34% 13% 6%
≥1 Medical conditions	86%
≥1 Mental health conditions	71%

## Experiences: Gender-based discrimination

Military: "[Providers] were judgmental based on my age and the fact that I'm a female. They made it sound like I'm going to miss doses [of the pill], going to be negligent and going to get pregnant. The military opened my eyes to just how sexist people are."

Military: "Just how doctors word stuff, like you're a kid. Like they'll try to shy away from the topic."

VA: "They kind of blow me off with, 'you have PTSD <u>and</u> you're a woman, so it must be in your head, it's not something real.'"

## Experiences: Pressure & Judgment

Military: "She was a very nice doctor and all, but it felt like she was trying to push that medication on me, telling me she was on it herself, and knew people who have tried it. It made me feel pressured to choose it."

VA: "Some of the doctors kept trying to push more things with 'if you don't want this, maybe you should try this'. And I'm like 'no, I don't want <u>any</u> of this."

## Experiences: Pressure & Judgment

Military: "I was only 20. I was nervous to even talk about [wanting to get pregnant] to a lot of providers because I didn't want to be judged."

Military: "I was
Iike 'oh my God, my doctor is
going to think that I'm a whore'.
I knew that was unrealistic and
she probably didn't think
anything of it, but it was just
those racing thoughts talking to
her about birth
control."

VA: "Mostly, the thing I get is that I'm 28 and I have three kids...So my kids are fine financially, so why are you worried about me being 28 with three kids? At the end of the day, you're not raising the kids, I am."

Variation by Black race: judgment & stereotype threat

Military: "I was

of providers because I didn't want to be judged." Military: "I was like
'oh my God, my doctor is going
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VA: "Mostly, the thing Laet is that I'm 28 and I have three kids...S Having too many y, so why are you worried a children end of the day, you re not raising the kids, I am."

## Experiences: Validation and partnerships

VA: "She'II go over every single option and the pros and cons of each and she'II answer any questions at all...she didn't pressure me. She understood and let me make my own decision. She's never made me feel like I wasn't valid in any of my concerns."

VA: "She actually gives me choices and suggests what's best for me and what's not best for me. But she does give me the choice of what to take. She just doesn't say 'here take this.' She gives me the risks and benefits and together we choose from there what is best for me."

## Implicit/Explicit Preferences

#### **Counseling Preferences:**

- 1. Provider initiates and validates the conversation
- 2. Trust and non-judgmental support
- 3. Preferences and values elicited and shared decision making

### Information preferences:

- 1. Information ahead of visit to be prepared
- 2. Web-based information helpful if can review it with a provider

## Aim 1: Qualitative VA PCP study

> Study population: Designated women's health PCPs in VA Puget Sound or Pittsburgh systems

#### > Methods

- ➤ Recruitment by email
- ➤ Semi-structured qualitative telephone interviews 11/16-2/17
- ➤ Open-ended questions about their approaches and experiences with providing reproductive health care
- > Thoughts and preferences related to tools/interventions

#### ➤ Analysis

Transcripts analyzed using deductive and inductive content analysis and identified key themes

## Provider Sample Characteristics

- ➤ 10 providers: 4 internal medicine MDs, 1 family medicine MD, 4 nurse practitioners
- ≥6 from Puget Sound, 4 from Pittsburgh
- ≥9 females, 1 male
- ▶ 5 VA only, 5 VA & University affiliation

## Experiences: Provider approaches

Most described using patient-centered approaches to counseling

"Sometimes the right method is the one that the woman is going to stick with. It's not helping her out if she tells me one thing because she thinks I want to hear it. I'll ask what's going to work and what she's going to actually use."

"Really it's about being open to and letting the patient drive it. It's their plan, not my plan, so it's 'what do you want'? And let me figure out how to help get what you want."

## Experiences: Challenges to patient-centered care

➤ Difficulty with understanding ambivalent pregnancy intentions or decisions to not use contraception.

"I just clarify that with them,
'so basically what you're telling me is that you're
trying to conceive, because if you're not preventing, then
you're trying'. [Ambivalence] is usually a red flag if there's
some other strange thing happening in the relationship. I
just find that it's such an aberrant attitude towards
pregnancy, that I start to wonder what else is
going on with them."

## Experiences: Challenges to patient-centered care

➤ Difficulty when women's preferences did not align with effective or hormonal birth control methods.

"I wish people wouldn't have these preconceived notions about chemicals or hormones."

"The conferences probably have placed something in my brain because I really try to push IUDs and implantables. I think that's what gets emphasized a lot in training programs."

# Preferences related to interventions to improve counseling & care

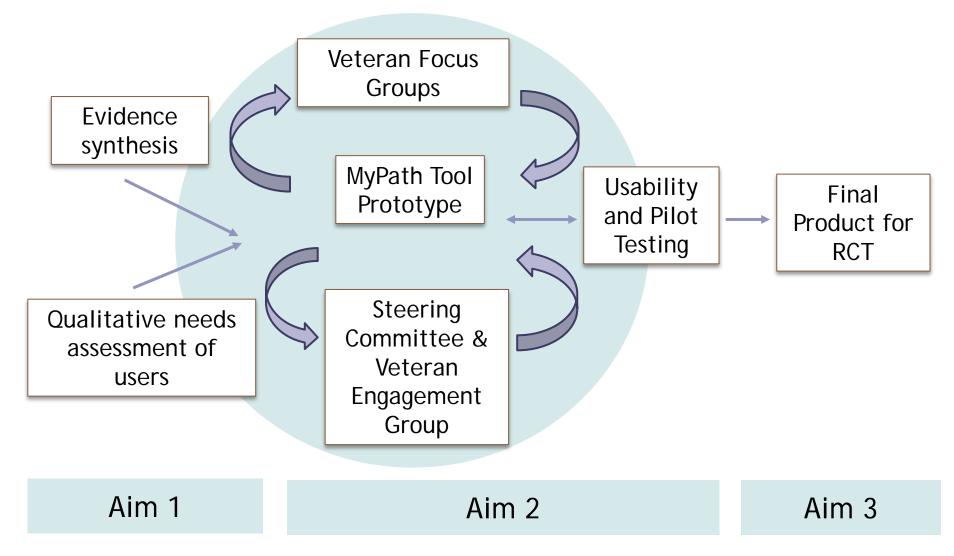
- Tools to provide education or identify patients' needs ahead of visit viewed as potentially useful
- Interventions or tools should not add to PCP workload or disrupt clinic flow
- No additional clinical reminders!

## Poll question #3

If you are a clinician, have you used any patientfacing web-based decision support or education tools in your practice?

- a) Yes
- b) No

## MyPath Tool Development Framework



International Patient Decision Aid Standards, https://decisionaid.ohri.ca/odsf.html

## Aim 2: MyPath Paper-based Storyboard

#### Section

#### **Objective**

- 1. Thoughts & Feelings about Pregnancy
- 2. Menstrual Cycle & Fertility
- 3. Health Before Pregnancy

4. Birth Control\*

Help women clarify reproductive goals and communicate them to providers

Educate about fertility and menses common misperceptions

Educate about preconception risk factors and health behavior modification.

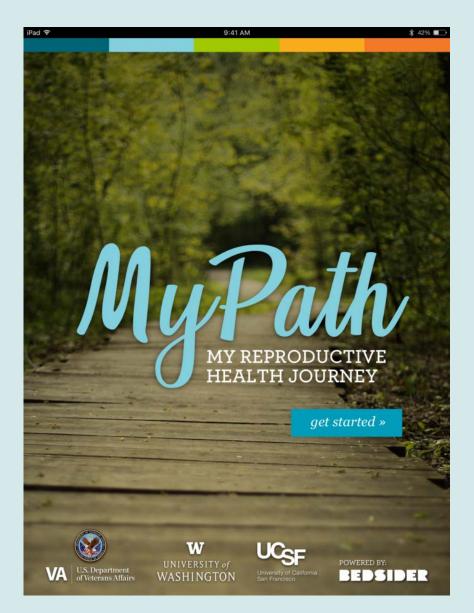
Educate women about method aspects, side effects, support women in linking individual preferences and needs to specific methods

Summary Printout: Bring to visit to facilitate shared decision making

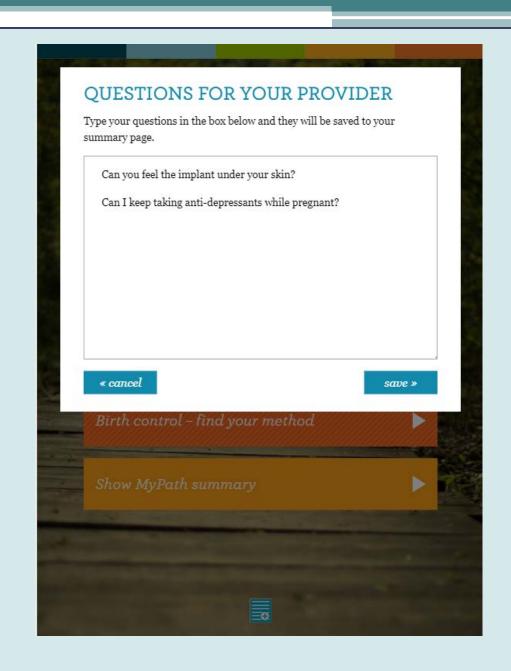
<sup>\*</sup>Birth control section adapted from a previously developed tool by Dehendorf et. al at UCSF

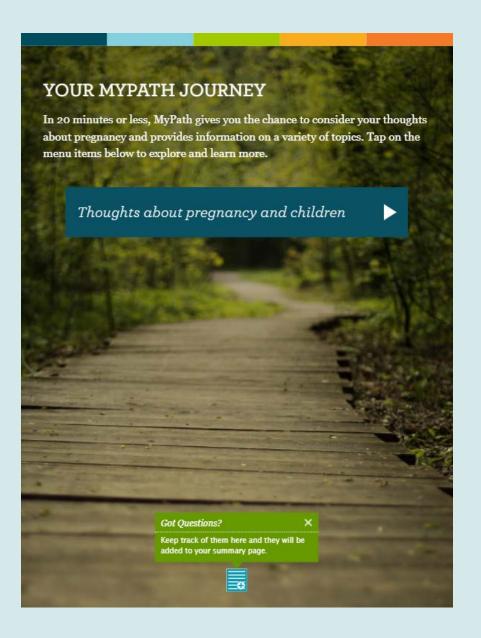
## Aim 2: Usability Testing Highlights

- 1. Many women did not read instructions → "show rather than tell" with modal pop-up boxes
- 2. Women wanted control over what they viewed and order → made content optional with open menu
- 3. Some women uncomfortable with personal nature of pregnancy thoughts questions → added "Prefer not to answer" response
- 4. Overall most women had very positive experience of tool, however some felt too much info → control over amount of information they view









#### THOUGHTS ABOUT PREGNANCY

The next few questions are designed to help you consider your thoughts and feelings about pregnancy. There are no right or wrong answers and these answers might change over time.

Do you currently have any children?



Do you think you might like to have children at some point?

yes no ✓ not sure	9		no		✓ not sure
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What are your thoughts about pregnancy today?





next »

#### HEALTH BEFORE PREGNANCY

If you are considering pregnancy now or in the future, you might be interested in learning about how your health could affect a pregnancy.

Click on each of the images below to learn about things you can do before pregnancy so you and your baby can be as healthy as possible.



folic acid & healthy lifestyle



medical conditions



mental health



medications



relationships



healthy weight



infections



spacing between babies



### MENTAL HEALTH

Mental health conditions like depression, anxiety, and PTSD may increase your chance of having a baby born early and having postpartum depression. Working with your mental health providers to be as healthy as possible can help.



Add My mental health conditions to my



### **MEDICATIONS**

Many medications are safe in pregnancy, but some medications or vitamins can be harmful to a developing baby. Talking to your provider about your medications before pregnancy can help you be prepared.



My medications added to my summary



next »

#### YOUR MYPATH SUMMARY

Here is a summary of your information from MyPath. You can take it into your visit with your health care provider to start your conversation about your reproductive goals and health.

My Thoughts on Pregnancy and Children				
Your thoughts on children	Not sure if I want children			
Your thoughts on pregnancy	I would like to be pregnant later, but not now			
When you think you might like to become pregnant	In the next few years			
How important avoiding pregnancy is to you	Very important			
How happy you would feel if you got pregnant	Somewhat happy			
How upset you would feel if you got pregnant	Somewhat upset			
Your current birth control method(s)	the pill			
Satisfaction with your current birth control method(s)	Somewhat satisfied			

#### My Topics: Menstrual cycle and fertility FAQ / Health before pregnancy

□ Fertility

- □ My medical conditions
- □ My medications

□ Vaccines

□ Zika virus

- $\hfill\square$  Healthy birth spacing for me
- □ Finances or housing □ Family history of medical or mental health problems

#### My Questions

Can you feel the implant under your skin?

Can I keep taking anti-depressants while pregnant?

Birth control methods you want to talk about /





### Aim 2: MyPath Pilot Study

- ➤ Primary objective: Assess acceptability and feasibility of using MyPath in real-world clinical setting
- ➤ Study population: Women Veterans ages 18-44 with scheduled primary care visit at the VA Puget Sound Women's Clinics
- Inclusion criteria: Self or partner not sterilized or infertile, sexually active with men
- ➤ Design: Non-randomized 2-arm pilot study
  - > Recruit 30 controls prior to introducing the tool in clinic
  - > Recruit 30 intervention after introducing the tool in clinic

### MyPath Pilot Study

Usual care Control (n=30)

Baseline survey in waiting room before visit

Provider interaction

Post-visit survey

3 month follow up survey

Intervention (n=30)

Baseline survey in waiting room before visit



Uses MyPath Tool in Clinic Waiting Room

Provider interaction



Receives 1-page Summary to Bring to Visit

Post-visit survey



3 month follow up survey

### MyPath Pilot Study Outcomes

- Acceptability and feasibility:
  - Surveys and open-ended questions for Veterans and PCPs
- Preliminary assessment of efficacy:
  - ➤ Communication Outcomes
    - Receipt of counseling
    - Provider-patient communication quality and shared decision making
    - Provider-patient communication self-efficacy (PEPPI scale)
  - > Patient-centered Outcomes
    - Preconception/Contraception knowledge
    - Preconception/Contraception self-efficacy
    - Decision conflict scale for contraception

- Behavioral/Clinical Outcomes
  - Contraceptive use
  - Effectiveness of contraceptive method
  - Preconception health behavior change

## Summary and next steps

- Addressing gaps in VA reproductive health services needed to ensure women Veterans are able to achieve healthy and desired pregnancies
- ➤ MyPath Decision Support tool was developed using theory and evidence-based design to educate and empower women Veterans and has the potential to improve care and outcomes
- Next steps include completion of pilot testing, further refinement of tool/intervention in preparation for RCT and implementation studies in partnership with Women's Health Services

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# Veteran Engagement Group

"Women 4 Women Veterans"



### Questions?



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