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Genitourinary Health in Female Military Personnel: An Exploration of Prevalence and Occupational Performance

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Background:

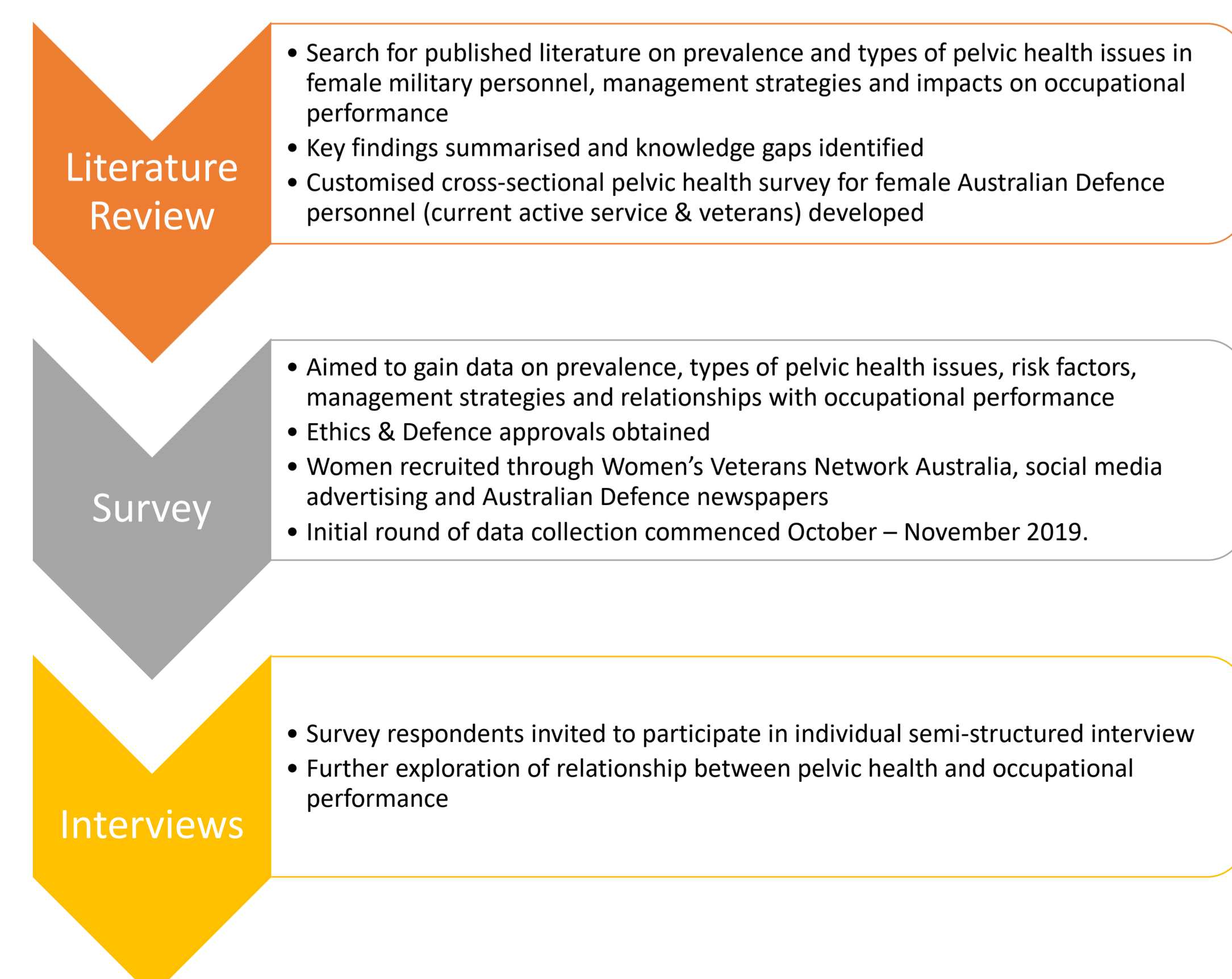
- Women are increasingly assuming more diverse roles within military forces worldwide.
- A growing female workforce necessitates targeted health care support¹.
- Genitourinary health issues, such as urinary tract infections (UTI) and incontinence, are more common in females² and can impact on work performance³
- Women working in military contexts may be more at risk due to austere nature of many military environments and physical job demands

Objectives:

- Explore what is currently known about female genitourinary health in military contexts
- Consider the relationships between female genitourinary health and military occupational health, safety & performance

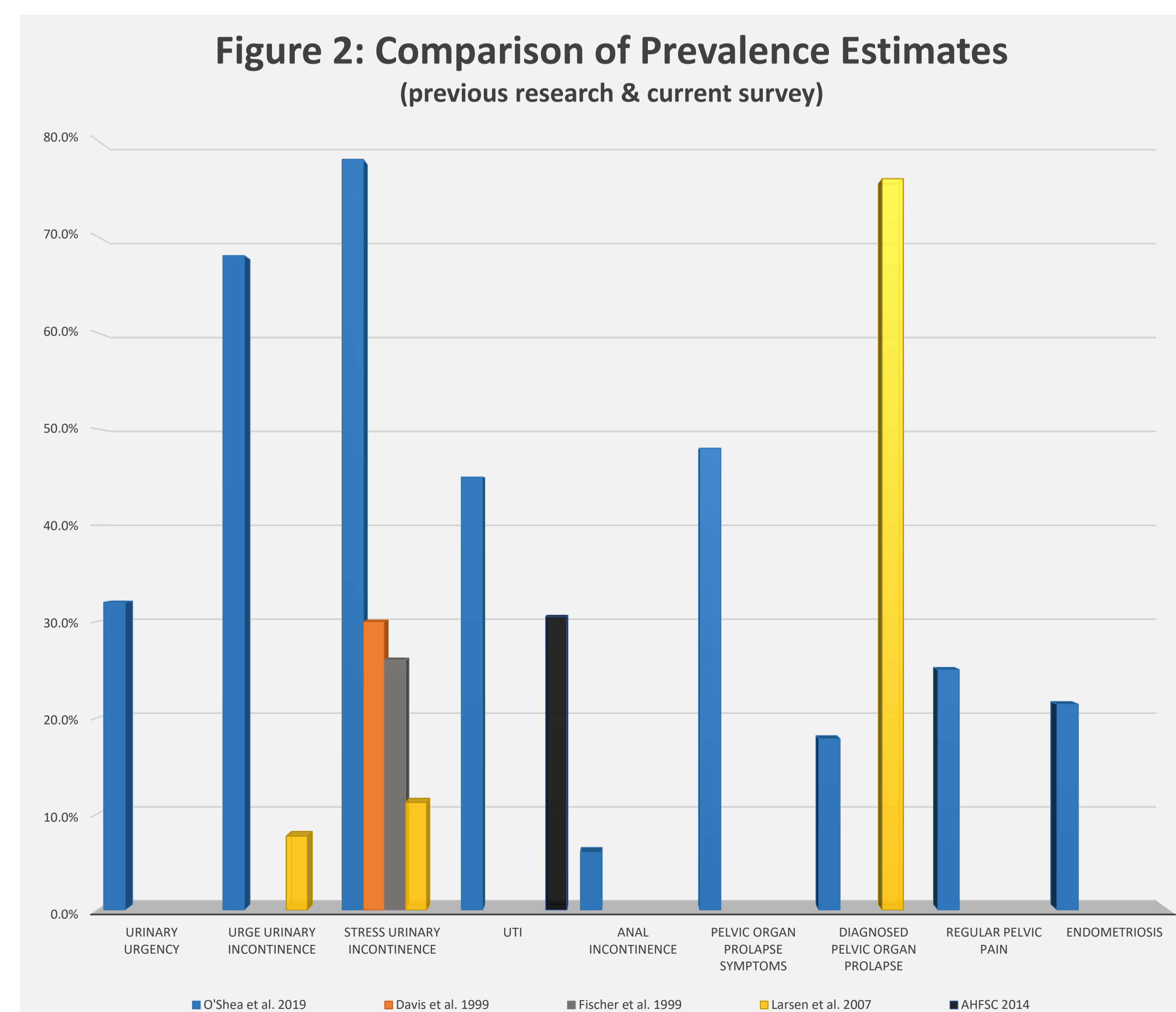
Method:

Figure 1: Outline of research process



Literature Review Findings:

- Limited published research (Figure 2)
- UTIs affect 30.5% servicewomen (3.5% men)⁴
- 26 – 30% of active Army & Air Force servicewomen reported urinary incontinence^{5,6}
- Evidence of worsening pelvic organ support after military training, with higher risk in paratrooper trainees (RR = 1.57)⁷
- Women less likely to seek medical support for genitourinary health conditions⁸
- Common management strategies, such as fluid restriction and altered voiding patterns may increase the risk of UTIs, heat-related illness and impaired occupational performance⁹
- No published research outside US military context



Preliminary Research Data:

Table 1: Summary of key attributes from initial survey respondents

Respondents	N = 147
Service:	
Navy	20%
Army	50%
Air Force	30%
Mean age (years)	41 (range 19 – 73)
Full time service	75%
> 10 years service	74%
Commissioned Officers	50%
Pelvic health concerns	77%

- Common management strategies: fluid restriction, pads/liners, frequent toileting, pelvic floor exercises, activity modifications, surgery, bowel management
- Pelvic health issues typically had a mild to moderate impact on work performance
- 3 individual interviews completed

Take home messages:



References:

1. McGraw et al. (2016). Women in Combat: Framing the Issues of Health and Health Research for America's Servicewomen. *Military Medicine*, 181(1):S7-S11
2. Hawthorne, G. (2006). Measuring incontinence in Australia. *The Department of Psychiatry, The University of Melbourne, DoHA*.
3. Pierce et al. (2016). A systematic review of prevalence and impact of symptoms of pelvic floor dysfunction in identified workforce groups. *J Adv Nurs*, 72(8), 1718-1734.
4. AHFSC (2014). Urinary tract infections, active component, U.S. Armed Forces, 2000-2013. *MSMR*; 21(2): 7-11.
5. Davis, G et al.(1999). Urinary incontinence among female soldiers. *Military Medicine*, 164(3), 182-187.
6. Fischer, J. R., Berg, P.H. (1999). Urinary Incontinence in United States Air Force female crew. *Obstetrics & Gynecology*, 94(4), 532-536.
7. Larson, W. I., Yavorek, T. (2007). Pelvic prolapse and urinary incontinence in nulliparous college women in relation to paratrooper training. *Int Urogyn J*, 18, 769-771.
8. Ryan-Wenger, N. A., & Lowe, N. K. (2015). Evaluation of Training Methods Required for Military Women's Accurate Use of a Self-Diagnosis and Self-Treatment Kit for Vaginal and Urinary Symptoms. *Mil Med*, 180(5), 559-564.
9. Steele, N., & Yoder, L. H. (2013). Military Women's Urinary Patterns Practices, and Complications in Deployment Settings. *Urologic Nursing*, 33(2).

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