



# Evaluating Treatment Compliance to Guidelines by Sex of Skin and Soft Tissue Infection in a Community ED



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## Introduction

Skin and soft tissue infections (SSTIs) result due to a break in the skin that gets infected by bacteria. SSTIs commonly present to the emergency department (ED) as cellulitis, skin abscesses, and more. Standard treatment encompasses either incision and drainage and/or treatment with antibiotics. In conjunction with antibiotics, there is evidence for the use of osteopathic manipulative techniques (OMT) to help enhance the immune system, improve treatment outcomes, and decrease duration of antibiotic therapy [1]. Data from other disease processes has shown that females are more likely to experience worse outcomes and health disparities due to lack of representation [2].

## Objectives

To analyze SSTI treatment compliance rates to specified guidelines by sex at a community ED. Additionally, to evaluate re-presentation rates as a result of disparity to treatment by sex.

## Methods

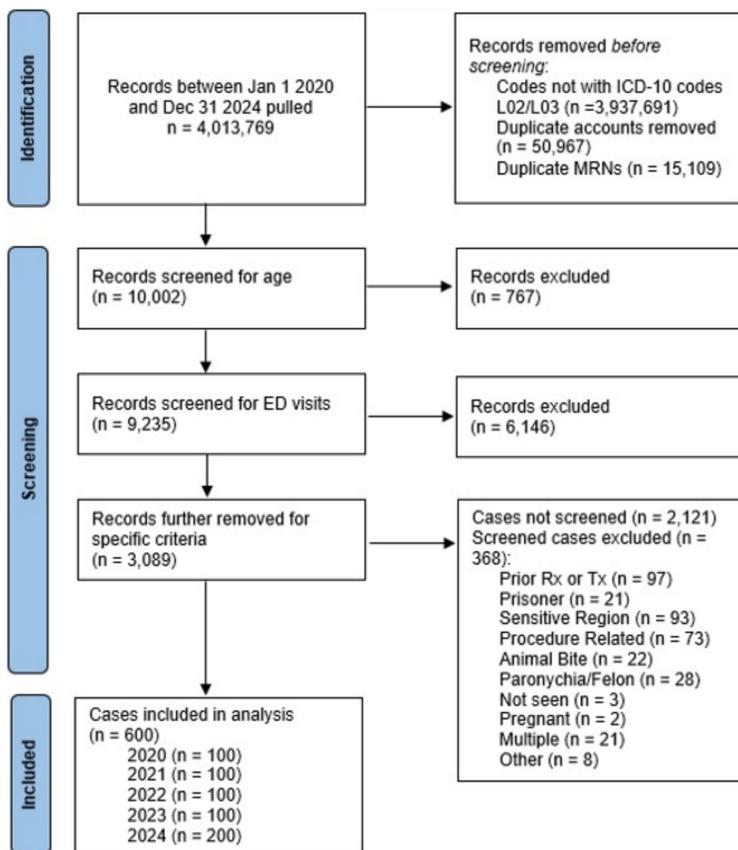


Figure 1: PRISMA graph depicting methodology

## Results

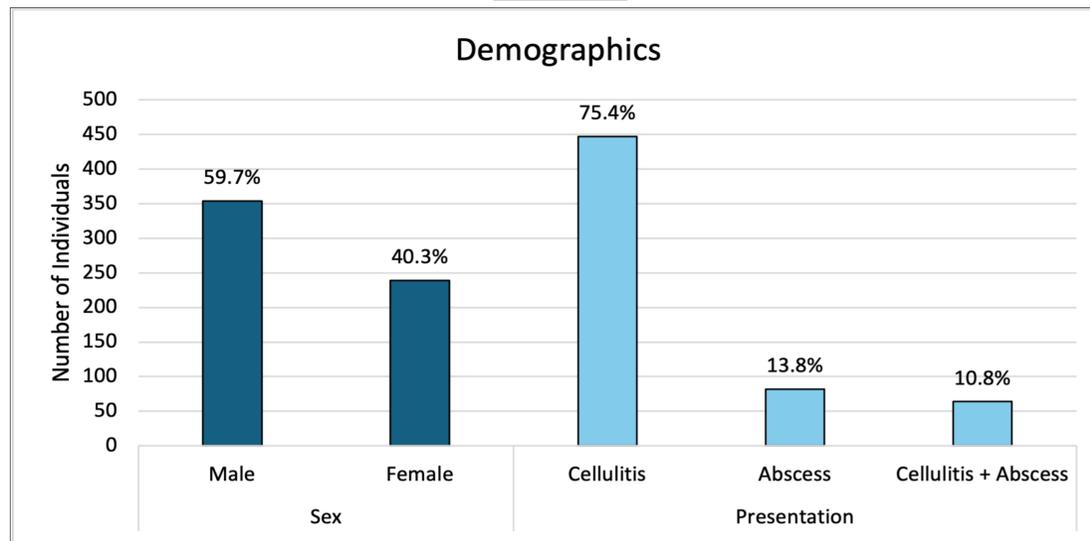


Figure 2: Demographics of sex and clinical presentation

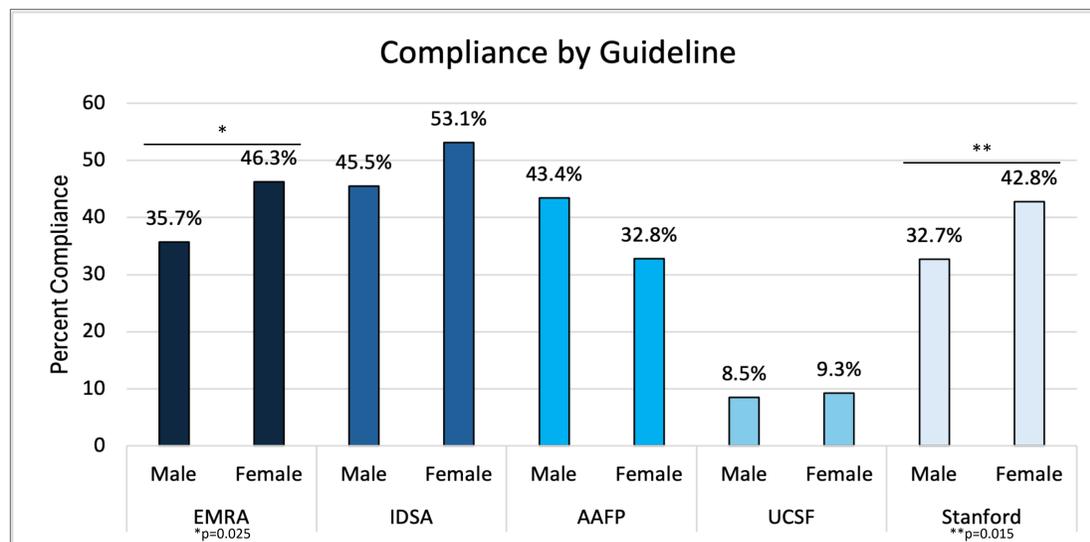


Figure 3: Compliance to guideline by sex

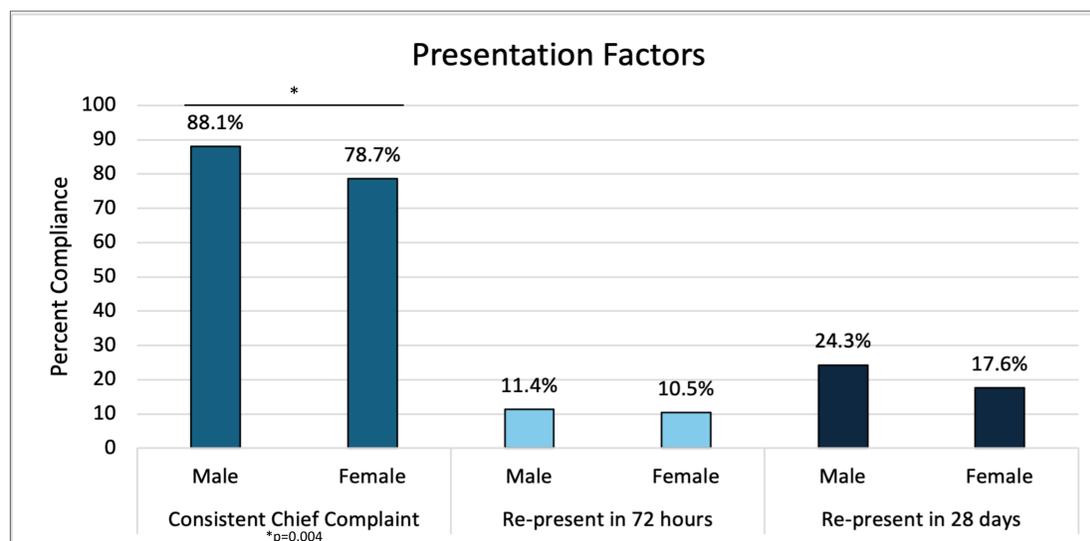


Figure 4: Sex comparison by chief complaint presentation and rep-presentation to the ED in 72 hours or 28 days

## Discussion & Conclusion

Despite females being more likely to not present with a chief complaint consistent with a SSTI, they were more likely to receive compliant treatment to both EMRA and Stanford guidelines in comparison to males. Presenting with a different chief complaint could be resultant of generalized sex differences when it comes to accessing healthcare, for example perception of their need to see a provider or fear of bad outcomes or interactions with providers. Despite suboptimal compliance to treatment guidelines, there was no difference between sex for re-presentation to the ED within 72 hours or 28 days after initial presentation.

Moving forward, research should be implemented on the use of OMT as an adjunct to antibiotic treatment, in an effort to decrease re-presentation to the ED and improve overall outcomes. Further research should be conducted on sex disparities, to provide better whole person care.

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## References

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