



# Research Week 2020

## Transgender Health in Orthopaedic Care: A Literature Review

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### Keywords

Orthopaedics, Surgery, Transgender

### Abstract

#### Background

Approximately 1.4 million adults in the United States identify as transgender. This population has been identified as a group that experiences disparities in healthcare. Although transgender individuals present with unique considerations for surgical and perioperative care, there is a paucity of research evaluating transgender health in orthopaedics.

#### Methods

We carried out a scoping review of existing literature to identify physiological and social factors of transgender care pertinent to orthopaedics.

#### Results

As transgender individuals can be in different stages of transition, the decision to evaluate risk factors based on either a patient's biologic sex or their gender identity must be given special attention. Many transgender individuals undergo gender-affirming hormone therapy (GAHT) and may experience effects of exogenous estrogen and testosterone on bone mineral density and bone geometry. These are important indicators of fracture risk and possibly fracture healing. Hormone therapy may also affect rates of tendon and ligament injury. Several unique perioperative characteristics bear consideration, most notably an increased risk of venous thromboembolism among transgender women on GAHT. Numerous studies have emphasized that increased social stresses and discrimination experienced by transgender individuals contribute to an elevated prevalence of drug use, HIV, and homelessness. These factors may lead to more frequent interactions with the orthopaedic trauma community and could place them at risk for poorer surgical outcomes. Providers may benefit from increased awareness of the barriers to care faced by transgender individuals, including financial stress due to limited coverage of transgender-related services and previous negative healthcare experiences that discourage individuals from seeking future care.

## Conclusions

Effective care of transgender individuals in the orthopaedic setting must take into account physiological, psychological, and socioeconomic considerations. Further research is needed to evaluate fracture risk, elucidate surgical complication profiles, and optimize operative and perioperative care of transgender individuals in orthopaedic settings.