Patient Satisfaction and Out-of-Pocket Costs Associated with Aspirin and Low-Molecular-Weight Heparin: A Secondary Analysis of the PREVENT CLOT Study Nathan N. O'Hara, PhD, MHA; Deborah Stein, MD, MPH; Katherine Frey, PhD; Joseph F. Levy, PhD; Gerard P. Slobogean, MD, MPH; Renan C. Castillo, PhD; Reza Firoozabadi, MD, MA; Madhav A. Karunakar, MD; Joshua L. Gary, MD; William T. Obremskey, MD, MPH, FIOTA; Rachel B. Seymour, PhD; Robert V. O'Toole, MD; METRC Group

Purpose: We aimed to determine if the type of thromboprophylaxis affected patients' medication satisfaction and out-of-pocket costs after orthopaedic trauma. We hypothesized that patients treated with aspirin would have increased medication satisfaction and lower out-of-pocket costs.

Methods: This was a prespecified secondary analysis of PREVENT CLOT, a randomized clinical trial performed at 21 trauma centers in the US and Canada. We included adult patients with an operatively treated extremity fracture or a pelvis or acetabulum fracture, treated operatively or nonoperatively. Patients were randomly assigned to 30 mg low-molecular-weight heparin (enoxaparin) or 81 mg aspirin, twice daily. The duration of thromboprophylaxis was based on existing hospital protocols. Our main outcomes were patient satisfaction and out-of-pocket costs. We measured patients' thromboprophylaxis satisfaction using a 7-point Likert scale adapted from the Treatment Satisfaction Questionnaire for Medication. Patients reported their total out-of-pocket costs associated with thromboprophylaxis 90 days after injury. We estimated treatment effects using cumulative logit and logistic regression models.

Results: A total of 9115 patients completed the medication satisfaction question, and 6723 patients reported their out-of-pocket costs. The mean age was 44 years (standard deviation [SD] 17), and 88% had a lower extremity fracture. The odds of greater medication satisfaction were 2.6 times higher for patients assigned to aspirin than those assigned to low-molecular-weight heparin (odds ratio [OR], 2.59; 95% confidence interval [CI]: 2.39 to 2.80; P<0.001). Overall, the odds of incurring any out-of-pocket costs for thromboprophylaxis medication were 51% higher for patients assigned to aspirin compared to low-molecular-weight heparin (OR, 1.51; 95% CI: 1.37 to 1.66; P<0.001). However, patients assigned to aspirin had substantially lower odds of out-of-pocket costs exceeding \$25 (OR, 0.15; 95% CI, 0.12 to 0.18; P<0.001).

Conclusion: Among orthopaedic trauma patients, aspirin substantially improved medication satisfaction. While aspirin increased the odds of incurring any out-of-pocket costs, it protected against costs exceeding \$25, possibly improving health equity for thromboprophylaxis. These data should be considered by patients, health-care systems, and clinicians when prescribing thromboprophylaxis for orthopaedic trauma patients.