

case study

Positively Impacting Perioperative Hip Fracture Outcomes

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Hip fractures are some of the most common fractures seen in the emergency department (ED), and the number of hip fractures is only estimated to increase – almost doubling by 2050. Fall-related hip fractures among older patient populations are particularly common, with about 300,000 fall-related cases each year. Given the complexity of these cases, driven in part by co-morbidities in an older patient population, surgical complications can be serious. Blood-related complications are one of the most common. However, emergency and surgical teams can implement proactive protocols **to decrease length of stay and reduce adverse events.**

Perioperative Hip Fracture Complications

Reduced mobility following a hip fracture, along with other risk factors, can increase the likelihood of a blood clot. Venous Thromboembolism (VTE) and Deep Vein Thrombosis (DVT) have been estimated to affect up to 50% of patients. Bleeding is likewise a concern during surgical intervention for hip fractures, with the need for transfusions placing unnecessary strain on resources and leading to unnecessary risk for patients. Delays in care can increase these risks. A 2017 study showed that every 10 hours of waiting time prior to surgery increased the risk of serious adverse events by 12%. Even a wait of 24 hours has been shown to increase risk of serious complications and mortality.

Driving Solutions for Change

With this evidence, teams should prioritize timely care for hip fracture patients moving through the ED and operating room (OR). Moving patients to the OR within 24 hours and administration of consistent medication protocols are critical. TeamHealth partners with facilities to provide in-house orthopedic surgery coverage to improve clinical outcomes and operations, while allowing private surgeons to grow their elective cases without the burden of call coverage. One such partnership involves a healthcare system that sought to implement consistent and standardized protocols to address hip fracture complications.

Partnership Information
A health system in Connecticut

TeamHealth Services
• Orthopedic Hospitalist

Tranexamic acid (TXA) has been shown to reduce bleeding and the need for transfusion for hip fracture patients. In particular, the timely administration of TXA in the ED and OR can decrease blood loss. The administration of TXA goes together with the need for expeditious care for hip fracture patients requiring surgical intervention. As noted, patients receiving surgery within 24 hours of ED presentation are already at a significantly reduced risk of adverse complications, and the standardization of TXA administration further reduces the risk of complications.



Enhancing Surgical Outcomes

The system has a set protocol for TXA dosage in the ED and the OR, and this protocol is consistently adhered to by the orthopedic surgical team. Where other facilities might face hurdles adopting consistent procedures due to the need for call coverage from individual surgeons, the system has consistent coverage from one team, TeamHealth, so there were no barriers to immediate and consistent adherence to the TXA protocol. This shows in the impressive results from the team:

- Since the protocol was put in place, hip fracture patients were **56% less likely to receive a blood transfusion.**
- Median wait times for hip fracture patients moving from the ED to the OR have also **decreased 3 hours, from 25 to roughly 22 hours,** meeting the desired benchmark and recommendation of a 24-hour-or-less wait time for surgical patients.

Consistent Orthopedic Coverage Enhances Care

TeamHealth and the system share a common goal: ensuring exceptional patient care. With a strong partnership in place, patients get the care they need, when they need it. This not only ensures patients receive exceptional care but also ensures the facility functions smoothly. The strong partnership between TeamHealth and the system is a testament to the collaborative approach to clinical services that supports enhanced care delivery, clinical operations, and outstanding patient experience. TeamHealth's orthopedic hospitalist experts help facilities across the country strengthen care and performance each day. To learn more about our services, [reach out to our team.](#)



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