Fragility fractures are a common problem associated with significant short and long-term morbidity. Advances in operative management of these fractures have restored function for an increased number of patients. Optimal medical management of patients with fragility fractures has the potential to mitigate long-term morbidity and future fracture risk. The initiation of medical management in the acute setting may improve utilization of this optimal medical management and has been recommended by the American Academy of Orthopaedic Surgeons as the standard of care.

Our goal is to measure 25-OH Vitamin D levels upon admission for all hip fractures > 50 years old and treat with 1000 IU of vitamin D with calcium if they are vitamin D deficient. Our goal was 70% per quarter.

Information sessions were held each rotation block for residents with reminders. A spreadsheet of hip fracture patients was collected weekly and the QI resident reviewed vitamin D levels and treatment for recording purposes. Reminders were sent with positive encouragement and updates on progress.

100% of our hip fracture patients were vitamin D deficient.
86% received treatment.

We have yet to meet our goal of 70%, however with more frequent educational reminders, our percentages increased in Q3 and have potential for Q4.

This is the first year for a QI project in our department. Effectively reminding residents on the consult service to order vitamin D levels was the biggest challenge. Only 2 patients were vitamin D deficient and did not receive treatment. For missed vitamin D level orders, 57% were on the orthopaedic service and 43% on the medicine service, emphasizing the importance of communication to the primary service about the importance of bone health in hip fracture treatment and prevention.

We have developed a protocol for hip fractures with the Skeletal Health clinic.
Next year, we have an additional resident on the consult service, improving patient care.
We are adding Vitamin D to our order set and point of care reminders.
More frequent, monthly reminders to about vitamin D and our goal status
Increased familiarity of vitamin D evaluation among the residents.
Improve communication and education about the importance of bone health in our community.