

Clinical Integration IMPROVEMENT BULLETIN



Health Provider Services Organization

Teams focus on improving quality outcomes and the care experience for geriatric hip fracture patients (low impact falls)

Sponsors: Michael E. Ayers, MD, South Shore Orthopedics, Orthopedic Surgeon, Director of the Total Joint Replacement Program; James F. Green, Executive Director, Center for Orthopedics, Spine and Sports Medicine, South Shore Hospital

Project Owners: Alicia DelPrete, RN, BSN, ONC, Orthopedic Nurse Navigator, South Shore Hospital; Erica Dafford, MD, Orthopedic Trauma Surgeon, South Shore Orthopedics

Background: In 2011, a group of care providers from the South Shore Health System (the System) saw an opportunity to improve quality outcomes for geriatric fragile fracture patients. The multidisciplinary team included Orthopedics, Medicine, ED, Hospitalists, Nursing, Trauma, and Therapy staff at South Shore Hospital, as well as colleagues from South Shore Orthopedics, Welch Healthcare, and South Shore VNA. The group committed to collaborate on finding ways to improve our care of geriatric fracture patients. Part of the team visited Lancaster Hospital in Pennsylvania to study best practices and standard approaches to the pre-op processes resulting better outcomes because their geriatric patients were getting to the OR faster and had fewer post-op complications.

Goals include:

- Reduce length of stay
- Improve the ED Hip Fracture Order Set and increase percentage initiated
- Improve throughput time from ED to OR (<48 hours)

MEASURES

Process Indicators	National Benchmark	SSH Baseline	FY13	FY14	% change from SSH baseline
Volume of patients with hip fracture at SSH	N/A	126	243	283	125%
% Cases where ED Hip Fracture Order Set Initiated	N/A	N/A	80%	86%	7%*
*No baseline data available, result increase is from FY13-FY14					
Length of Stay (average in days)	4.5	6.22	5.8	6.4	(3%)
% Cases with ED-OR < 48 hours	80%	84%	91%	90%	7%

[Click here](#) to view the full Scorecard.

Questions? Contact Alicia DelPrete at 781-624-8593 or Alicia_DelPrete@sshosp.org

See page 2 for examples of process improvements.

Clinical Integration IMPROVEMENT BULLETIN



Health Provider Services Organization

The table below is a summary of the work being designed and implemented to achieve and sustain the target goals.

Problem	Solutions	Results	Next Steps
There was no ED Hip Fracture order set which led to inconsistency in ordering x-rays, labs, and consults. This led to over-processing/over-ordering of labs and multiple trips to x-ray s for patient, which negatively impacted the patient experience and caused delays.	<p>A new ED Hip Fracture order set was created to include the correct x-rays, labs, consults, and diagnostics needed to prepare patients to go to the OR.</p> <p>The order set also included low-dose narcotics to help prevent delirium.</p> <p>ED teams were educated on using the new order set.</p>	<p>All necessary testing is done to get the patient to the OR.</p> <p>All x-rays done at one time have improved patient comfort and have prevented delays of returning to x-ray</p> <p>Staff likes the streamlined approach.</p>	<p>Track the percent of patients who have the ED Hip Fracture order set used by the ED provider.</p> <p>Continue to educate staff regarding the value of using the order set.</p> <p>Monitor and report on the usage of the order set to create greater awareness and how it benefits patients.</p>
<p>Patient Coumadin levels need to be 1.5 in order to be admitted to the OR. There was no standard protocol to reverse Coumadin levels.</p> <p>There was variation among the ED providers, hospitalists, and orthopedic surgeons on ordering Vitamin K.</p>	<p>By working with the Pharmacy, Medicine, and Orthopedics, a Vitamin K Protocol was created and was added to the ED Hip Fracture order set.</p>	<p>This solution, along with other initiatives has contributed to a 7% point percentage rate increase in getting patients into the OR in less than 48 hours.</p>	<p>Continuing to monitor results and dosage.</p> <p>11/2014 Oral Vitamin K was replaced with IV form. This will allow for the reversal of elevated INRs to occur faster, which will allow our patient to have surgery in <36 hours. Plan to monitor over next 6 months and report out data.</p>
26% of patients developed post-operative delirium resulting in increased length of stay and safety issues.	<p>Standardized pain medication on ED Hip Fracture order set and on post-operative order sets to reduce post-operative delirium.</p> <p>Involve family member to assess patient's baseline mental status.</p> <p>Patient/family education: delirium brochure developed.</p>	<p>Saw reduced confusion in post-operative patients.</p> <p>Patients still getting good pain control.</p>	<p>Not at goal yet. Continuing to monitor results.</p> <p>Collaborate with OR and PACU to create standards for pain medications.</p>

Find more bulletins on the Clinical Improvement Corner on the Medical Staff website.
Email us at: hpso@sshosp.org. **For internal distribution only.**