

MEDICAL UNIVERSITY OF SOUTH CAROLINA FRACTURE LIAISON SERVICE

Stacey Rothwell, PA-C

Fracture Liaison Clinician and Coordinator



FINANCIAL DISCLOSURES

- None


LEARNING OBJECTIVE

- Describe an example of a bone health program's model of care.

BIOGRAPHY

- I grew up in Buffalo NY, and moved to Lexington, SC in 1997.
- I moved to Charleston, SC in 1999, and have been here since.
- I obtained my undergraduate from the College of Charleston and transferred to MUSC in 2001.
- Graduated from the Medical University of SC in 2003.
- Worked in Physiatry for 6 months right out of training.
- Moved to Pulmonary and Sleep Medicine for 3 ½ years in private practice.
- I have been in Orthopaedic Trauma at MUSC for the last 13 years. We started to develop the Fracture Liaison Service 5 years ago.
- I took over our FLS service in August of 2018.


INITIAL MUSC PROGRAM

- Endocrinology would see our patients while inpatient and establish outpatient follow up.
 - Very poor compliance with follow up post discharge.
 - The lead endocrinologist left MUSC and no one in endocrinology wanted to take ownership of her role with our FLS program.
 - Went to Greenville, SC to shadow Laura Boinneau, NP
 - After much discussion and planning, I took it over in August 2018.
- 
- A series of white diagonal lines of varying lengths and thicknesses are positioned in the bottom right corner of the slide, creating a modern, abstract graphic element.

OUR CURRENT PROGRAM AT MUSC

- I see patients for both their post op care and bone health evaluation.
- Obtain a vitamin D-25 level and TSH while inpatient and start them on supplementation before discharge.
- At their post op, will order additional screening labs and a DXA scan if not done in last 2 years.
- Patient information is added into Own the Bone registry through the AOA.
- I send my evaluation notes to their PCPs.
- Any unique findings from their work up will earn a referral to endocrinology.

OUR CURRENT PROGRAM AT MUSC

- Began with a half day clinic once per week.
 - Now has grown to a consistent full day clinic once a week with referrals from ortho and other subspecialties.
 - Endocrinology wait time is ~ 3-4 months.
 - Total number of patients is now over 400 and growing.
 - Patients appreciate the combination of a bone health work up in conjunction with their fracture care.
- 

BILLING WITHIN THE GLOBAL PERIOD

- I use the 24 modifier along with the diagnosis code for Pathologic fracture of the *** due to osteoporosis.
 - Examples:
 - M80.00XA – osteoporosis with current pathological fracture
 - M80.059A- pathologic fracture of the hip due to osteoporosis
 - M80.029A- Pathologic fracture of the humerus due to osteoporosis

NOTE TEMPLATE

CC: fragility fracture

HPI:

Osteoporosis Risk Factors:

Non-modifiable:

Personal Hx of fracture as an adult:

Height loss:

Hx of fracture in first-degree relative:

Caucasian race:

Advanced age:

Female sex:

Dementia:

Poor health/frailty:

Prolonged steroid use:

Potentially modifiable:

Tobacco use:

Low body weight (<127 lbs):

Estrogen deficiency

Early menopause (age <45) or bilateral
ovariectomy:

prolonged premenopausal amenorrhea (>1 yr):

Low calcium intake (lifelong):

Alcoholism:

Recurrent falls:

Inadequate physical activity:

NOTE TEMPLATE

Example Assessment: *** is a 75 y.o. female with a fragility fracture of their right hip.

Example Plan:

The patient would benefit from continuing vitamin D in the form of 1000 iu daily and adding Calcium supplementation with TUMs daily. Baseline labs in the form of TSH and PTH will be obtained today. I will contact them regarding any adjustments to their medications after reviewing their labs.

Given their history and recent fracture, I would like to initiate prescription medication therapy to build up their bone density and prevent future fractures. After thorough discussion with the patient and review of their past medical history, they would benefit from starting [medication name]. Discussed [medication name] therapy. The patient was informed of the risks/benefits of medication, and the patient voiced understanding. They have no known absolute contraindications at this time. Black Box warning of osteosarcoma was discussed with the patient. A patient education sheet was handed to the patient, and the patient was encouraged to ask questions after reviewing the material.

If her insurance does not cover [medication name], [medication name] would be a good option as well.

She was advised regarding the importance of a high protein diet that includes calcium in the form of food like dairy products and vitamin D in the form of food like eggs and vitamin D fortified foods.

Continue with regular exercise.

Weightbearing Status: WBAT


They would benefit from a follow up in 4 weeks with an updated DXA scan before their visit with me. They will require long term management of their osteoporosis.

All of the patient's questions have been answered, they are amenable to this plan.

EXPANSION OF THE PROGRAM

- Developed a business plan that we presented to our department chair.
 - Comprehensive summary of the growth of our program and the need for additional help with another APP and nurse navigator.
- We estimated the amount of growth we could expect with the addition of another provider, and put a monetary value on it.
 - Factored in the following items:
 - RVUs for the increase in office visits (new, established, etc)
 - Downstream revenue for ancillary services (DXA, labs, infusion services, etc)
 - Estimated cost savings of preventing future fractures

PLANS FOR THE FUTURE

- Additional APP
 - Increase clinic time
 - Hire a 0.5 FTE nurse navigator
 - Expand education about the program throughout MUSC and our health system
 - Increase activity with the OTB program and Bone Health ECHO programs, etc.
- 
- Several white lines of varying lengths and orientations are positioned in the bottom right corner of the slide, creating a modern, abstract graphic element.