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| Body System: Musculoskeletal | | |
| Session Topic: Geriatric Hip Fracture Management | | |
| Educational Format | | Faculty Expertise Required |
| REQUIRED | Interactive Lecture | Expertise in the field of study. Experience teaching in the field of study is desired. Preferred experience with audience response systems (ARS). Utilizing polling questions and engaging the learners in Q&A during the final 15 minutes of the session are required. |
| OPTIONAL | Problem-Based Learning (PBL) | Expertise teaching highly interactive, small group learning environments. Case-based, with experience developing and teaching case scenarios for simulation labs preferred. Other workshop-oriented designs may be accommodated. A typical PBL room is set for 50-100 participants, with 7-8 each per round table. <u>Please describe your interest and plan for teaching a PBL on your proposal form.</u> |
| Professional Practice Gap | Learning Objective(s) that will close the gap and meet the need | Outcome Being Measured |
| <ul style="list-style-type: none"> • Low utilization of anti-osteoporosis treatment after hip fracture • Less than 30% of patients hospitalized with hip fracture receive proper evaluation and care for osteoporosis • The course and outcomes of hip fracture patients are often complicated by cognitive impairment • There exists under assessment and treatment of acute pain in older hip fracture patients • Knowledge gaps with regard to screening guidelines; appropriate osteopenia treatment; knowing when to refer; using FRAX risk assessment; evidence-based treatment, especially concerning bisphosphonate use; appropriate calcium supplementation; guidelines on appropriate use of | <ol style="list-style-type: none"> 1. Confirm diagnosis of hip fracture in geriatric patients presenting with hip pain after a fall. 2. Address comorbidities and search for other injuries. 3. Coordinate referral to an orthopedic surgeon, emphasizing bleeding risk assessment, preoperative prophylaxis, and provide adequate analgesia. 4. Develop a long-term rehabilitation plan, emphasizing improved functional state, adherence to anti-osteoporosis treatment, and fall prevention. | Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations. |



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| imaging (e.g. DEXA); and appropriate guidelines for follow-up and management of hip fracture surgery | | | |
| ACGME Core Competencies Addressed (select all that apply) | | | |
| X | Medical Knowledge | | Patient Care |
| X | Interpersonal and Communication Skills | | Practice-Based Learning and Improvement |
| | Professionalism | X | Systems-Based Practice |
| Faculty Instructional Goals | | | |
| <p>Faculty play a vital role in assisting the AAFP to achieve its mission by providing high-quality, innovative education for physicians, residents and medical students that will encompass the art, science, evidence and socio-economics of family medicine and to support the pursuit of lifelong learning. By achieving the instructional goals provided, faculty will facilitate the application of new knowledge and skills gained by learners to practice, so that they may optimize care provided to their patients.</p> <ul style="list-style-type: none"> • Provide up to 3 evidence-based recommended practice changes that can be immediately implemented, at the conclusion of the session; including SORT taxonomy & reference citations • Facilitate learner engagement during the session • Address related practice barriers to foster optimal patient management • Provide recommended journal resources and tools, during the session, from the American Family Physician (AFP), Family Practice Management (FPM), and Familydoctor.org patient resources; those listed in the <u>References</u> section below are a good place to start <ul style="list-style-type: none"> ○ Visit http://www.aafp.org/journals for additional resources ○ Visit http://familydoctor.org for patient education and resources • Provide recommendations for confirming diagnosis of hip fracture in geriatric patients presenting with hip pain after a fall, as well as those presenting with hip pain without a fall. • Provide recommendations for addressing comorbidities and search for other injuries. • Provide strategies for coordinating referral to an orthopedic surgeon, emphasizing bleeding risk assessment, preoperative prophylaxis, and provide adequate analgesia. • Provide strategies for developing a long-term rehabilitation plan, emphasizing improved functional state, adherence to anti-osteoporosis treatment, and fall prevention. | | | |

Needs Assessment

Annually, there are at least 258,000 hospital admissions for hip fractures among people aged 65 and older. By 2030, the number of hip fractures is projected to reach 289,000, an increase of 12%.¹ Approximately 20% of persons die in the first year after sustaining a hip fracture; and for those who do survive, only 40% can perform all routine activities of daily living and only 54% can walk without an aid.^{1,2} Patients with hip fracture typically present with pain and typically are unable to bear weight on the affected extremity.^{2,3} Hip pain is a common presentation in primary care and can affect patients of all ages, potentially impacting as many as 14.3% of adults 60 years and older.⁴

Data from a recent American Academy of Family Physicians (AAFP) CME Needs Assessment survey indicate that family physicians have statistically significant and meaningful gaps in the



medical skill necessary to provide optimal management of geriatric hip fractures, osteoporosis, musculoskeletal exam techniques, and musculoskeletal imaging modalities.⁵ More specifically, CME outcomes data from 2012-2014 Assembly: *Geriatric Hip Fracture & Osteoporosis* sessions, indicate that physicians have knowledge and practice gaps with regard to screening guidelines; appropriate osteopenia treatment; knowing when to refer; using FRAX risk assessment; evidence-based treatment, especially concerning bisphosphonate use; appropriate calcium supplementation; guidelines on appropriate use of imaging (e.g. DEXA); and appropriate guidelines for follow-up and management of hip fracture surgery.⁶⁻⁸

Additionally, a review of the literature identifies the following practice gaps that should be addressed in this education:

- Low utilization of anti-osteoporosis treatment after hip fracture^{9,10}
- Less than 30% of patients hospitalized with hip fracture receive proper evaluation and care for osteoporosis¹¹
- The course and outcomes of hip fracture patients are often complicated by cognitive impairment¹²
- There exists under assessment and treatment of acute pain in older hip fracture patients¹³
- Family physicians sometimes have difficulty transitioning from practicing acute-care medicine to long-term care, as their patients age and are transitioned to long-term care facilities.

Physicians may improve their care of patients with hip fracture by engaging in continuing medical education that provides practical integration of current evidence-based guidelines and recommendations into their standards of care, including, but not limited to the following:^{2-4,14}

- Plain radiography should be the initial diagnostic test in patients with suspected hip fracture.
- Initial plain radiography of the hip should include an anteroposterior view of the pelvis and a frog-leg lateral view of the symptomatic hip.
- Magnetic resonance imaging should be used for detection of occult hip fractures, stress fractures, and osteonecrosis of the femoral head.
- Hip fracture surgery should be performed 24 to 48 hours after a fracture unless a delay is needed to stabilize comorbidities.
- Patients undergoing hip fracture surgery should receive thromboembolic and antibiotic prophylaxis.
- Following a hip fracture, patients should usually be treated with a bisphosphonate, regardless of their bone mineral density, unless contraindicated.
- Following a hip fracture, most patients should have a formal fall-prevention assessment.
- Patients should receive post-fracture rehabilitation to help restore functional capability.
- Indwelling urinary catheters should be removed within 24 hours of hip fracture surgery.
- Patients with hip fracture should receive adequate analgesia for pain control.
- Do not use DEXA to screen for osteoporosis in women younger than 65 years or men younger than 70 years with no risk factors.
- American Academy of Family Physicians
- Do not routinely repeat DEXA scans more often than once every two years.



Physicians can improve patient satisfaction with the referral process by using readily available strategies and tools such as, improving internal office communication, engaging patients in scheduling, facilitating the appointment, tracking referral results, analyzing data for improvement opportunities, and gathering patient feedback.^{15,16}

These recommendations are provided only as assistance for physicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's family physician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations. These recommendations are only one element in the complex process of improving the health of America. To be effective, the recommendations must be implemented. As such, physicians require continuing medical education to assist them with making decisions about specific clinical considerations.

Resources: Evidence-Based Practice Recommendations/Guidelines/Performance Measures

- Management of hip fracture: the family physician's role²
- Hip fracture: diagnosis, treatment, and secondary prevention³
- Guidelines for the Management of Hip Fractures in the Elderly¹⁷
- National Clinical Guideline Center. Guidelines no. 124: Hip fracture: The management of hip fracture in adults¹⁸
- Evaluation of the patient with hip pain⁴
- Choosing Wisely® DEXA for Osteoporosis¹⁴
- Adding health education specialists to your practice¹⁹
- Envisioning new roles for medical assistants: strategies from patient-centered medical homes²⁰
- The benefits of using care coordinators in primary care: a case study²¹
- Engaging Patients in Collaborative Care Plans²²
- The Use of Symptom Diaries in Outpatient Care²³
- Health Coaching: Teaching Patients to Fish²⁴
- Medication adherence: we didn't ask and they didn't tell²⁵
- Encouraging patients to change unhealthy behaviors with motivational interviewing²⁶
- Integrating a behavioral health specialist into your practice²⁷
- Simple tools to increase patient satisfaction with the referral process¹⁵
- FamilyDoctor.org. Hip Fractures Overview (patient education)²⁸
- FamilyDoctor.org. Osteoporosis Overview (patient education)²⁹

References

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