Geriatric Hip Fracture Management: PBL

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Robin Cornell Creamer, DO, FAAFP

Assistant Director, Florida Hospital Family Medicine Residency, Winter Park; Assistant Director, Geriatric Medicine Fellowship Program, Florida Hospital, Orlando; Associate Professor, Florida State University College of Medicine, Tallahassee; Assistant Professor, University of Central Florida College of Medicine, Orlando.

Dr. Creamer is a graduate of the Chicago College of Osteopathic Medicine, Downers Grove, Illinois, and completed her family medicine residency at Florida Hospital in Orlando. She also recently completed a fellowship in geriatric medicine at Winter Park Memorial Hospital, Florida. Dr. Creamer has been practicing and teaching family medicine for more than 20 years. Following her passion for osteoporosis prevention, she leads a National Osteoporosis Foundation (NOF) support group called Central Florida Healthy Bones and has earned her NOF fracture liaison service certificate. She believes one of family medicine's critical challenges is to motivate patients to be as physically active as possible.

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Nathan Falk, MD, FAAFP

Assistant Director, Sports and Family Medicine Faculty, Florida Hospital Family Medicine Residency, Winter Park, Florida.

Dr. Falk is a graduate of the University of Nebraska College of Medicine. He completed his family medicine residency at Offutt Air Force Base (AFB). He served as residency faculty and director of sports medicine at Offutt AFB/University of Nebraska where he was the 2012 Faculty of the Year. Dr. Falk specializes in advanced non-surgical care for musculoskeletal conditions, including evaluation, ultrasound, and injections, as well as medical care of the athlete, ranging from asthma to concussions. Additionally, he has interest in faculty development and teaching residents to teach. He has published numerous chapters, books, and articles on sports and family medicine topics, as well as serving as an expert lecturer from Florida to China.

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David Lee, MPA

Executive Director, National Bone Health Alliance.

Lee is a graduate of the University of Nebraska in Lincoln and American University in Washington D.C. He joined the National Bone Health (NBHA) as executive director in March 2011. NBHA is a public-private partnership launched in late 2010 that bring together the expertise and resources of 50 organizational participants from private, non-profit, and government sectors to promote bone health and prevent disease; improve diagnosis and treatment of bone disease; and enhance bone research, surveillance, and evaluation. Among NBHA's signature initiatives include efforts to drive the widespread implementation of post-fracture liaison service care coordination programs; the 2Million2Many public and health care professional awareness campaign; and a variety of projects aimed at standardizing the use of bone turnover markers. Lee has more than 25 years of non-profit and for-profit health care expertise and executive leadership.

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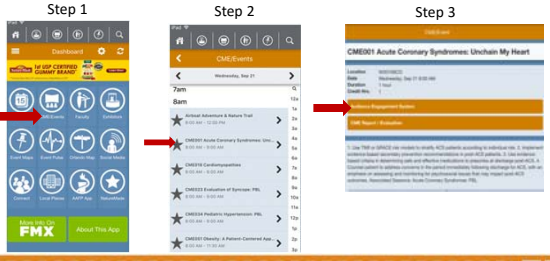
Learning Objectives

1. Practice applying new knowledge and competencies gained from geriatric hip fracture management sessions, and receive feedback from expert faculty.
2. Interact collaboratively with peers to solve complex and challenging case-study scenarios.
3. Develop problem-solving skills that promote effective reasoning to manage geriatric hip fractures within the context of professional practice.

Audience Engagement System

Step 1 Step 2 Step 3



Recommended Practice Changes

1. Review available resources for physicians to improve care of patients post-hip fracture.
2. Review and practice fall prevention screening tests and therapy exercises.
3. Discuss barriers and recommendations for improving care coordination for post-fracture care

Outline of the Session

- Review available physician resources
- Review screening for fall risk and practice exercises for fall prevention
- Introduce and discuss chronic care coordination as part of secondary fracture prevention
- Session breakout and discussion of ideas

Case

- 72 yo female presents to office after fall
- Had cough and URI
- Fell and broke her Right Hip
- Fixed by ortho and was in SNF for 2 wks
- Discharged yesterday

Case

- PMHx
  - HTN, CAD s/p PCI in 2010
- Meds
  - Lisinopril 20 mg daily, metoprolol 25 mg BID, ASA 81 mg daily

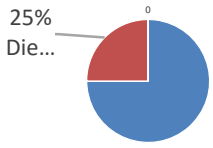
Case

- Vitals and Exam
  - BP 150/85, HR 85, RR 16
  - RRR, Lungs CTA
  - Walking with walker
  - Mild edema in both ankles

Case

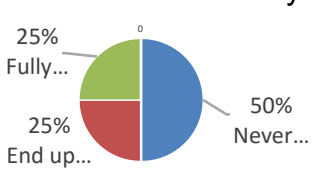
- Visit Plan
  - HTN and edema – add HCTZ
  - CAD – discussed statin, on ACE and B-Blocker
  - Face/Face form filled out and home PT ordered

Hip Fracture a Threat to Independence
One year after a Hip Fracture



[1]U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General. Bone Health and Osteoporosis: A Report of the Surgeon General. Washington, DC, 2004.
[2]Burge R, Dawson-Hughes DH, Wong JB, King A, Tosteson A. "Incidence and Economic Burden of Osteoporosis-Related Fractures in the United States, 2005-2025." JBMR 2007; 22 465-475.

Hip Fracture a Threat to Independence
Of the 75% who survive 1st year…



[1]U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General. Bone Health and Osteoporosis: A Report of the Surgeon General. Washington, DC, 2004.
[2]Burge R, Dawson-Hughes DH, Wong JB, King A, Tosteson A. "Incidence and Economic Burden of Osteoporosis-Related Fractures in the United States, 2005-2025." JBMR 2007; 22 465-475.

Prevent a Second Fracture: Performance Measure

- National Committee for Quality Assurance (NCQA) HEDIS measure: the number of women age 65-85 who suffered a fracture who had either BMD or a prescription for an anti-osteoporosis medication is less than 25%.
- Average cost of hospital episode of hip fracture is $42,000
- Current system leads to maximized charges
- Bundled care may provide better incentives to improve care and decrease cost

Available Resources

- National Osteoporosis Foundation
- National Bone Health Alliance
- CDC.gov

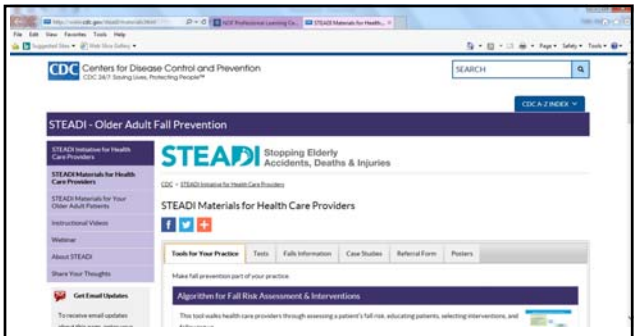
National Osteoporosis Foundation (NOF)

https://www.nof.org/

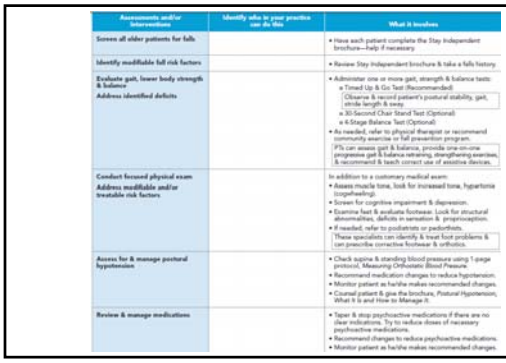
https://www.cme.nof.org/Resources.aspx

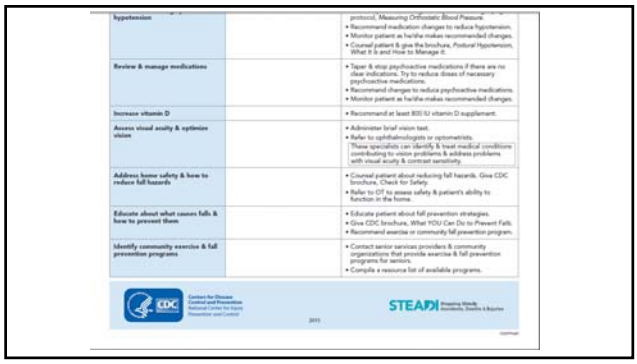
Fall Prevention Resources

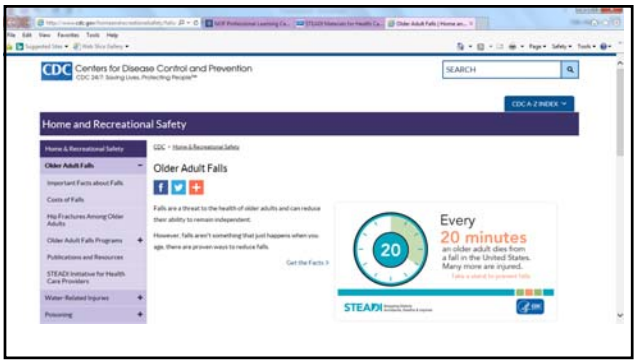
- Screening Tests
  - Timed Up and Go (TUG) Test
  - 30-second Chair Stand Test
  - 4-stage Balance Test
- CDC - Stopping Elderly Accidents, Deaths & Injuries (STEADI)
- CDC – A CDC Compendium of Effective Fall Interventions: What Works for Community-Dwelling Older Adults
- National Council on Aging National Falls Prevention Resource Center

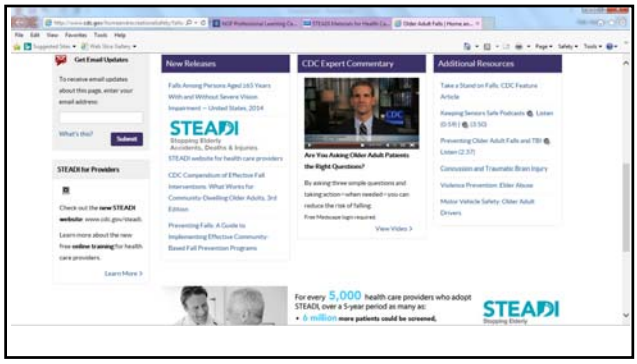


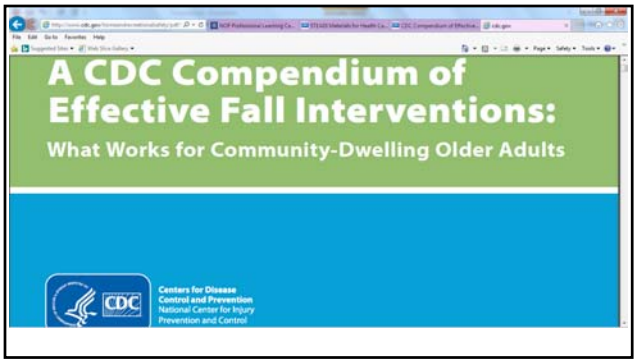
http://www.cdc.gov/steadi/materials.html











www.ncoa.org/center-for-healthy-aging/falls-resource-center/

Screening Tests for Fall Risk

- 30-second chair stand test
- Timed get up and go (TUG)
- 4-stage balance test

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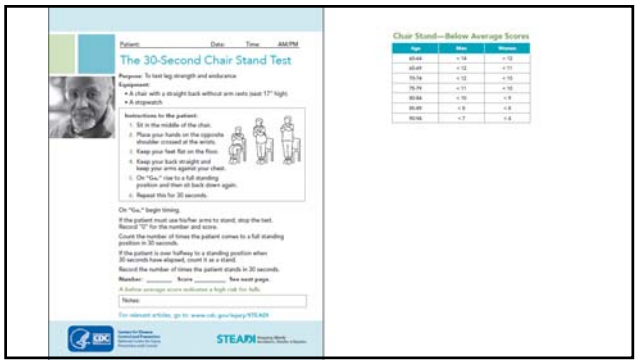

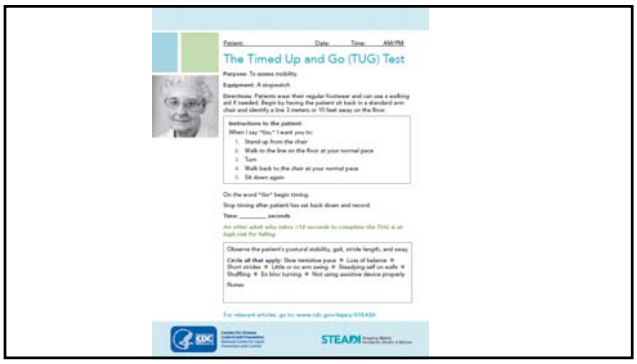

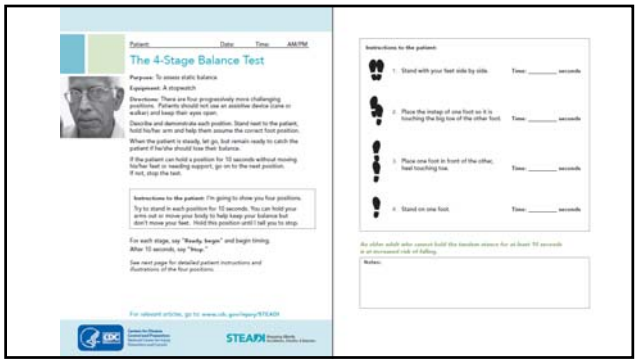

Available Options if Positive Screening

- Formal PT referral (home vs outpatient)
- Home exercises

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Otago Exercise Program

- 17 strength and balance exercises
- Developed in New Zealand
- 35-40% reduction in falls in frail elderly over 6-12 month period
- Improvement may start in as little as 8 weeks
- Promoted by:
  - Centers for Disease Control
  - Patient Centered Outcomes Research Project
  - Administration for Community Living

Shubert, TE, Smith, ML, Jiang, L. Ory, M. **Perceived and Actual Physical Performance Improvements from an In-Home Evidence-Based Fall Prevention Program for Older Adults** in Press for The Gerontologist

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Otago Exercise Program – 3 Main Components

- Strengthening
  - 5 muscle strengthening exercises
  - 2 sets of each exercise
  - 3 times each week
- Balance Retraining
  - 12 balance retraining exercises
  - 1 set each – progress from supported to unsupported
  - 3 times each week
- Walking
  - Advice and assistance
  - 2 times each week

http://www.hfwcny.org/Tools/BroadCaster/Upload/Project13/Docs/Otago_Exercise_Programme.pdf

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Practice Time!

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Head movements

- Stand up tall and look ahead
- Slowly turn your head as far as you can to the right
- Slowly turn your head as far as you can to the left
- Repeat five times to each side

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Back extension

- Stand up tall with the feet shoulder-width apart
- Place the hands on the small of the back
- Gently arch back
- Repeat five times

Side hip strengthening exercise

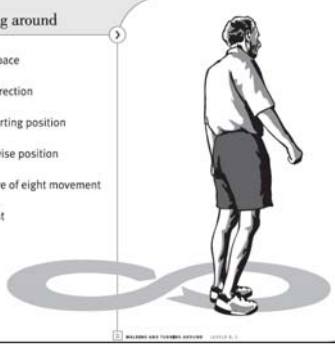
- Strap the weight on to your ankle
- Stand up tall beside the bench
- Hold on to the bench
- Keep the exercising leg straight and the foot straight forward
- Lift the leg out to the side and return
- Repeat ( ) times
- Strap the weight on to the other ankle
- Turn around
- Repeat this exercise ( ) times

Knee bends – hold support

- Stand up tall facing the bench with both hands on the bench
- Place your feet shoulder-width apart
- Squat down half way, bending your knees
- The knees go over the toes
- When you feel your heels start to lift, straighten up
- Repeat ( ) times

Walking and turning around

- Walk at your regular pace
- Turn in a clockwise direction
- Walk back to your starting position
- Turn in an anti-clockwise position
- The exercise is a figure of eight movement
- Repeat this movement



Prevent a Second Fracture

- Greatest Risk for Hip Fracture is a Previous Hip Fracture!
- Patients with hip fractures are at an increased risk for a second fracture.
- Secondary fracture prevention has been proven to decrease recurrent fracture rates, yet less than 30% of patients hospitalized with a hip fracture receive proper evaluation and care for osteoporosis.
- National Committee for Quality Assurance(NCQA) HEDIS measure: the number of women age 65-85 who suffered a fracture who had either BMD or a prescription for an anti-osteoporosis medication is less than 25%.

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Dual-energy X-ray Absorptiometry (DXA)

- How do I get it covered?
- AKA – I'm tired of resubmitting!!!

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Great for Patient It's Ordered…

- But reimbursement has really gone down. What's being done to address this?!?!

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National Bone Health Alliance Overview

- Launched in late 2010 as a public-private partnership that brings together the expertise/resources of its public, private and non-profit sector partners
  - co-convened by the National Osteoporosis Foundation and American Society for Bone and Mineral Research
  - working toward the goals and recommendations of the *U.S. Surgeon General's Report on Osteoporosis* and *National Action Plan on Bone Health*
- **55 organizational participants**
  - ***30*** *non-profit members*
  - ***20*** *private sector members*
  - ***5*** *government agency liaisons (CDC, CMS, FDA, NASA, NIH)*
- **Collective reach: over 100,000 health care professionals and 10 million consumers**
- Uses its collective voice and diverse membership base to:
  - weigh in on subjects important to bone health
  - foster ongoing communication among individuals and organizations interested in bone health
  - identify shared priorities/projects that can become reality through pooled funding

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Major NBHA Initiatives (1)

- Driving the widespread adoption of **Fracture Liaison Service (FLS) care coordination programs**, led by NP/PA/RN care coordinators that collaborate with the patient's PCP to ensure individuals who fracture receive appropriate screening, diagnosis, treatment (if needed) and support
  - **Fracture Prevention CENTRAL (www.FracturePreventionCENTRAL.org):** an online portal on FLS programs, was launched in March 2013 - over 3,600 registered users
    - *resources include over 30 archived webinars, business plans, case studies (all available free of charge)*
  - Developed and piloted **FLS cloud-based IT/registry tools** that enable sites to quickly establish FLS programs and move the needle on major quality measures/improve care coordination (available through www.ostonics.com
  - **NBHA/NOF Osteoporosis Qualified Clinical Data Registry (www.medconcert.com/FractureQIR):** only osteoporosis-focused QCDR which enables HCPs to report on osteoporosis and other quality measures
  - Testing use of **CMS Chronic Care Management CPT code (99490)** which provides ~$40/member/month to physicians/other qualified HCPs that perform at least 20 minutes of clinical staff time per calendar month in non-face-to-face care coordination for patients with 2 or more chronic conditions
    - *this CPT code has been underutilized (only ~100,000 patients billed to date)*
    - *major new incentive that can provide greatly needed reimbursement for the FLS Coordinator function/chronic disease care coordination in the primary care setting*

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Major NBHA Initiatives (2)

2Million2Many Awareness Campaign: In 2012, NBHA launched the 2Million2Many campaign, which focuses on the connection between bone breaks and osteoporosis and the 2 million fractures that occur each year

- *the campaign centers around "Cast Mountain", an installation that represents the 5,500 bone breaks that occur each day in the U.S. (2 million per year)*
- *there is a variety of free print, video and other materials at www.2Million2Many.org*

Payer Summit/Reimbursement Dossier: NBHA intends to develop a reimbursement dossier (to be published in 2017) around the cost effectiveness of the variety of bone health prevention, detection and treatment interventions, which would include:

- *a summary of the clinical, economic, and humanistic value and supporting evidence for prevention, detection and treatment interventions*
- *background information on osteoporosis and post-fracture care (disease prevalence, burden of illness, epidemiology, etc.)*

Before developing the dossier, NBHA will convene a **payer summit** to obtain feedback on what evidence would be needed for payers to consider updating their reimbursement guidance and decisions around these bone health interventions (target date: October 2016)

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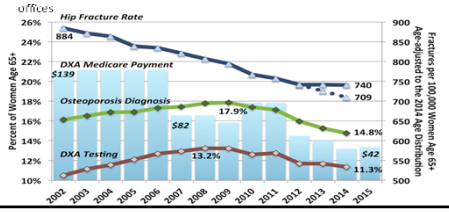
Major NBHA Initiatives (3)

DXA Bone Density Payment Reform: Since 2012, due to a drastic cut in the reimbursement rate for DXAs performed in physician offices (from a high of ~$140 in 2006 to $42 in 2015), **over 2 million fewer DXAs have been performed which has led to a decrease in DXA testing and diagnosis rates (as well as an increase in hip fractures after over a decade of steady decline)**

- NBHA is championing a bill in the U.S. House of Representatives, HR 2461 (to be introduced in the Senate shortly) that would set a floor of **$98** for Medicare reimbursement rates for DXA performed in physician's offices



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Care Coordination

- 3 questions?
  - What are barriers to meeting recommended guidelines for post-hip fracture care within your current practice?
  - What resources would be helpful to overcome these barriers?
  - How could you incorporate osteoporosis and post-osteoporotic fracture care into practice using chronic disease model/CPT?

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Care Coordination

- Idea Sharing

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Outline of the Session

- Review available physician resources
- Review screening for fall risk and practice exercises for fall prevention
- Introduce and discuss chronic care coordination as part of secondary fracture prevention
- Session breakout and discussion of ideas

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References and Resources

- www.nof.org
- www.nbha.org
- www.cdc.gov/steadi/materials.html
- www.med.unc.edu/aging/cgec/exercise-program
- www.cdc.gov/homeandrecreationalsafety/falls/compendium.html
- http://www.hfwcny.org/Tools/BroadCaster/Upload/Project13/Docs/Otago_Exercise_Programme.pdf

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Associated Session

- Geriatric Hip Fracture Management: A Threat to Independence

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