ARTICLES IN THIS ISSUE

• Your Most Important Patient is YOU: LifeBridge for Members
• CME: Falls in the Community-Dwelling Elderly
Dear Colleagues,

The Duval County Medical Society exists, first and foremost, to serve physicians. With that in mind, I am excited to share with you the new Northeast Florida Medicine, now monthly instead of quarterly. To enhance your member benefits, we will now be providing a new CME article—totally free for DCMS members—every month. We are also working behind-the-scenes to improve our CME website and hope to have the new version launched in early Autumn. On top of that, we are now able to report the CME you earn through the DCMS to CE Broker. As always, we strive to help you meet the demands and challenges of medical practice and we thank you for your membership.

Respectfully,

Ruple J. Galani, MD, FACC
2018 DCMS President

ANNUAL DCMS Navy Dinner
August 28, 2018 at the NAS Jax Officers’ Club
Exhibition Hour, Annual Awards Ceremony, & Keynote Presentation

Price: $50 per ticket
Deadline to register is Friday, August 10th

KEYNOTE SPEAKER:
Rear Admiral Bruce Gillingham,
Deputy Chief of the Bureau of Medicine and Surgery, Readiness & Health

TO REGISTER:
Call Sallie Baumann at 904-355-6561 ext. 2002
dcmsonline.org/DCMSNavyDinner

Duval County Medical Society
Physicians have the highest rate of suicide amongst all professions in the United States. It’s important to let that fact be set aside and resonate. How is it that the profession that is dedicated to improving quality of life and saving lives can also be stricken with an epidemic of stress and burnout? The most recent Medscape Lifestyle Report indicated the following as the most prominent causes for stress amongst physicians:

1. Too many bureaucratic tasks
2. Spending too many hours at work
3. Feeling like just a cog in a wheel
4. Increased computerization of practice
5. Income not high enough

As you can see, all of those top five issues deal with external pressures and changes on the medical field. Physicians love to care for their patients, they don’t love it when a torrent of external factors makes it difficult or impossible to do so in the way they were trained.

More than half of all physicians report signs of burnout. That number is growing rapidly, increasing by more than 10% in just four years. As a result, a number of resources have been created to address physician wellness, including mindfulness seminars, yoga classes, and more. Unfortunately, physicians have been reticent to seek the type of professional care they need to address their signs of stress or burnout... Until now.

Introducing LifeBridge: Confidential Physician Counseling.

LifeBridge is provided to all members of the Duval County Medical Society via the DCMS Foundation. LifeBridge is a safe and confidential program to help get you back to feeling like yourself.

- LifeBridge is like no other physician wellness program out there. The service provides up to six free in-person sessions with a counselor to discuss any issue which is causing you stress or burnout. It doesn’t matter if it’s a troublesome co-worker, marital issues, or difficulty dealing with a bad outcome. You get the help of a licensed professional at no charge to the physician.

- LifeBridge does NOT create an actual medical record. Unfortunately, many physicians have expressed concern that seeking appropriate help from a mental health professional will create a medical record and could impact their licensure. LifeBridge has been designed in conjunction with the Florida Board of Medicine specifically to be a pre-clinical program that does not create a medical record.

- LifeBridge is completely confidential. From the moment you call our LifeBridge Hotline, your personal information is protected. Only your counselor will know your personal information, so it can never be reported to the DCMS, your employer, or any other group.

- LifeBridge has a diverse panel of counselors who have committed to making themselves available for an appointment within 24 hours of your call to the wellness line. They are specially trained to work with physicians, and have confidential office space located across the metropolitan area.

LifeBridge is the path to get you back to the life you want to be living. I encourage you to write down the number, even if you don’t need it today. You may have a friend or colleague who needs it now or in the future.
Falls in the Community-Dwelling Elderly

**Background:**
The Duval County Medical Society (DCMS) is proud to provide its members with free continuing medical education (CME) opportunities in subject areas mandated and suggested by the State of Florida Board of Medicine to obtain and retain medical licensure. The DCMS would like to thank the St. Vincent’s Healthcare Committee on CME for reviewing and accrediting this activity in compliance with the Accreditation Council on Continuing Medical Education (ACCME).

This issue of *Northeast Florida Medicine* includes an article, “Falls in the Community-Dwelling Elderly” authored by Reetu Grewal, MD, which has been approved for 1 AMA PRA Category 1 credit. For a full description of CME requirements for Florida physicians, please visit [www.dcmsonline.org](http://www.dcmsonline.org).

**Faculty/Credentials:**
Reetu Grewal, MD, Clinical Associate Professor, Community Health & Family Medicine, UF College of Medicine – Jacksonville and Medical Director, UF Health Baymeadows Family Medicine.

**Objectives:**
1. Discuss the multifactorial nature of falls in the elderly.
2. Describe the screening tests available for fall-risk assessment.
3. Describe fall preventive strategies for the community-dwelling elderly.

**Date of release:** August 1, 2018  **Date Credit Expires:** August 1, 2020  **Estimated Completion Time:** 1 hour

**How to Earn this CME Credit:**
1) Read the “Falls in the Community-Dwelling Elderly” article.
2) Complete the posttest. Scan and email your test to Kristy Williford at kristy@dcmsonline.org.
3) You can also go to [www.dcmsonline.org/NEFMCE](http://www.dcmsonline.org/NEFMCE) to read the article and take the CME test online.
4) All non-members must submit payment for their CME before their test can be graded.

**CME Credit Eligibility:**
A minimum passing grade of 70% must be achieved. Only one re-take opportunity will be granted. If you take your test online, a certificate of credit/completion will be automatically downloaded to your DCMS member profile. If you submit your test by mail, a certificate of credit/completion will be emailed within four weeks of submission. If you have any questions, please contact Kristy Williford at 904-355-6561 or kristy@dcmsonline.org.

**Faculty Disclosure:**
Reetu Grewal, MD reports no significant relations to disclose, financial or otherwise with any commercial supporter or product manufacturer associated with this activity.

**Disclosure of Conflicts of Interest:**
St. Vincent’s Healthcare (SVHC) requires speakers, faculty, CME Committee and other individuals who are in a position to control the content of these educations activity to disclose any real or apparent conflict of interest they may have as related to the content of this activity. All identified conflicts of interest are thoroughly evaluated by SVHC for fair balance, scientific objectivity of studies mentioned in the presentation and educational materials used as basis for content, and appropriateness of patient care recommendations.

**Joint Sponsorship Accreditation Statement**
This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of St. Vincent’s Healthcare and the Duval County Medical Society. St. Vincent’s Healthcare designates this educational activity for a maximum of 1 AMA PRA Category 1 credit. Physicians should only claim credit commensurate with the extent of their participation in the activity.
Falls in the Community-Dwelling Elderly

By Reetu Grewal, MD, FAAFP and Ross Jones, MD, MPH, FAAFP

Department of Community Health & Family Medicine, UF Health Jacksonville

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Abstract

Falls are a substantial source of morbidity and mortality in the community-dwelling elderly, leading to physical and psychological injury, increased healthcare costs, and risk of long-term care admission. There are multiple risk factors for falls, including a hazardous home environment, increasing age, a history of falls, and polypharmacy. Physicians caring for elderly patients should perform annual risk assessments and be prepared to provide advice on fall-risk modification strategies.

Background/Epidemiology

Falls are a common occurrence among the elderly, with greater than one in four community-dwelling elderly falling each year. Falls are a significant source of morbidity and mortality in the elderly, and are the leading cause of death from injury in persons older than 65 years. In Floridians greater than 65, unintentional falls are the leading cause of fatal and non-fatal injuries. Falls in the elderly can cause physical injuries including fractures, lacerations, traumatic brain injury, and wounds. Recurrent falls increase the risk of long-term care institution admissions, and may lead to a fear of falling and patients imposing functional limits on themselves. Falls in the elderly are also expensive, with Medicare costs for falls in 2015 costing over $31 billion, mostly due to hospital-associated costs.

Risk Factors and Screening

There are many risk factors for falls, and the combination of such factors cause an increased likelihood of falling. The leading cause of falls is a hazardous environment, with increasing age, a history of falls, lower extremity weakness, arthritis, use of a cane or other assistive device, and visual and cognitive impairment. Certain medications increase the risk of falls including antidepressants, anti-hypertensives such as diuretics, anti-psychotics, anti-convulsants, benzodiazepines, sedatives, and hypnotics. Polypharmacy, in particular the use of more than four medications, increases the risk for falls.

The American and British Geriatrics Societies recommend routine screening for falls at least yearly, with a brief screening for low-risk populations. Patients who present with a history of falls, or who display gait and/or balance abnormalities on examination should undergo a more thorough evaluation. Discussing and managing fall risk is also an annual Medicare Healthcare Effectiveness Data and Information Set (HEDIS) requirement.

Evaluation

The evaluation of falls in the community-dwelling elderly is primarily based on the history and physical. Given that falls are usually multifactorial, a detailed history and physical can help to differentiate the extent to which external, environmental factors and intrinsic, personal factors contribute to a fall or history of falls.

The evaluation of a patient with a history of falls should begin with a comprehensive history. One of the most important parts of the history should be a detailed account of the patients’ previous falls. The provider should ask about the location and time of the most recent and previous falls. It is important to note the activities in which the patient was engaged prior to and during the falls. Providers should also inquire about the patient’s history of chronic diseases, such as osteo-arthritis, chronic musculoskeletal pain, and diabetes, and the status of these diseases.

Providers should thoroughly review the patients’ medications list. Studies have shown sedatives and hypnotics, antidepressants, and benzodiazepines to be significantly associated with falls. Other classes of medications including antihypertensive agents, neuroleptics, narcotics, and nonsteroidal anti-inflammatory drugs also increase the risk of falls. Additionally, patients on more than four medications are at an increased risk for falls.

A patient’s neurological status including cognitive status should also be assessed. Cognitive impairments can be
determined during the history. The patient’s evaluation of their ability to complete the activities of daily living should be noted. The history should also include questions about the patient’s home environment and social supports.

The physical examination also plays an important role in the evaluation of an elderly patient with a history of falls. It should hone in on the intrinsic factors that may play a role in falls and include assessment of the patient’s vital signs along with a vision and hearing screening. A comprehensive neurological examination should also be performed including an assessment of the patient’s gait and muscular strength. The patient’s postural stability and coordination can be evaluated using a variety of tests such as the Timed Up and Go Test, Tinetti’s Mobility Scale, or the Physical Performance Test.

The Timed Up and Go Test is widely used. With this test, patients are timed while covering a fixed distance after rising from a standard chair, covering the required distance and then returning to a seated position in the chair. The patient’s recorded time is compared to the mean time for other adults in their age group. The Tinetti’s Mobility Scale is a 16-item assessment of a patient’s gait and balance. The patient’s gait and balance are gauged in a variety of situations including transferring and changing directions. The Physical Performance Test helps identify functional and physical changes in elderly adults.

Laboratory studies should be directed by the results of the history and physical and may include a complete blood count, BUN/creatinine, thyroid stimulation hormone, Vitamin B12, and 25-OH Vitamin D levels. These studies may rule out reversible causes of falls including anemia, dehydration, and nutritional deficiencies. Radiological studies and other diagnostic tests are often not needed; however, imaging of the brain and/or spine, echocardiography, and Holter monitoring may be recommended.

Prevention

Fall-risk modification counseling for all elderly patients is recommended by the U.S. Preventive Services Task Force. Due to the multifactorial risk factors for falls, there is no single superior method to prevent falls. While interventional approaches targeting a single risk-factor are effective, numerous studies validate that a multifaceted, yet individualized, approach to interventions is most effective. Physicians who are unable to coordinate a multifactorial intervention from their office may consider a referral to a fall prevention program. Exercise programs including targeted muscle strengthening, walking programs, and gait and balance training, when performed under the supervision of a physical therapist, significantly reduce fall-risk. Fall prevention programs incorporating balance retraining, including Tai-Chi & the Otago exercise program, are most effective. Patients requiring assistive devices should undergo an occupational therapy evaluation to ensure they are using the correct device and in an appropriate manner. Referral to an optometrist or ophthalmologist is indicated for any patient displaying a vision impairment on examination. It should be noted, however, that patients undergoing correction for a visual problem may initially experience an increase in falls as they adjust to their improved sense of vision and perception. Since hazardous living environments are the leading cause of falls, a home safety assessment is an important part of a fall risk modification. An assessment should be performed by family members instructed on safety measures or a home health agency as part of a comprehensive falls prevention program. Identified hazards should be removed, and the home environment modified (Table 1). Appropriate home safety assessment and modification was shown to decrease risk of falls by 20 percent in patients recently discharged from the hospital. A patient-oriented home safety checklist is available on the Centers for Disease Control and Prevention’s website.

Table 1: Common Home Hazards and Modifications

| 1. | Keep floors bare. If you have rugs, make sure they lay flat and are skid proof. |
| 2. | Use double-sided tape to keep edges down or buy rugs with rubber backing. |
| 3. | Clear stairs, hallways, and rooms are well lit. Use night-lights in hallways. |
| 4. | Ensure handrails on stairways are sturdy. |
| 5. | Do not run electrical or phone cords across rooms. Tape cords down and run them next to the wall. |
| 6. | Make sure furniture is sturdy and secure any bulky furniture items, including TVs to the wall to prevent toppling over. |
| 8. | Wipe up spills immediately. |
| 9. | Wear shoes with rubber soles in the home; do not wear slippers. |
| 10. | Install non-skid strips or mats in the bathtub or shower. |
| 11. | Install a grab bar or handrail in the shower and near toilet. |

4 Vol. 69, No. 2 2018 Northeast Florida Medicine  DCMSonline.org
A comprehensive medication review followed by reduction in the dosages and/or total number of medications has been shown to reduce fall risk. Specifically, reducing or eliminating psychotropic medications from a patients’ medication list can result in a dramatic reduction in fall risk, although in one study almost half of the patients resumed their discontinued medication a month following the study. Many patients may be reluctant to adjust their medication regimens, particularly if they have been on medications for a long time, or have had adverse reactions to other medications. A patient-centered approach, discussion on risks and benefits of each medication, proposed medication alternatives, and gradual tapering off medications should be employed.

For appropriate patients, a cardiac intervention may be beneficial in reducing fall risk. Patients with a history of falls who also demonstrated carotid sinus hypersensitivity and underwent treatment with dual chamber pacing showed a two-thirds reduction in falls one year after pacemaker placement compared to a control group. Patients who have underlying cardiac arrhythmias or syncope that is clearly linked to a fall should undergo consultation with a cardiologist. Postural hypotension should be addressed with slower transitions from sitting to standing, compression stockings, adequate hydration, medication adjustment, and use of salt and fludrocortisone or midodrine to maintain blood pressure when clinically appropriate. Vitamin D supplementation is recommended for patients at high risk for osteoporosis, and may reduce fall rates for patients in nursing homes. For community-dwelling elderly patients, supplementation with calcium up to 1200 mg, 800 IU of vitamin D, and bisphosphonate treatment for osteoporosis is effective in reducing fractures associated with falls.

Conclusion

Falls are a significant source of physical and psychosocial morbidity, and increased financial costs amongst the elderly. Physicians should perform screening for falls on their elderly patients at least yearly, and the evaluation for fall risk should include a review of medications, co-morbid conditions, physical examination including gait evaluation, and laboratory or other studies for select patients. Fall prevention programs should be multifactorial in nature including physical strengthening and balance programs, home safety assessment and modification, and medication review and modification.

References

# Falls in the Community-Dwelling Elderly

CME Questions & Answers (circle one answer)/Free to DCMS Members/ $55.00 charge non-members*

(Return by August 1, 2020 BY MAIL: 1301 Riverplace Boulevard, Suite #1638, Jacksonville, FL 32207 or ONLINE: www.dcmsonline.org/NEFMCME)

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1. What will you do differently as a result of this information?  
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2. How will you apply what you learned to your practice?  
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### Evaluation questions & CME Credit Information

Please evaluate this article. Circle one number using this scale: 1=Strongly Agree to 5=Strongly Disagree

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1. In the elderly, falls are:  
a. the leading cause of death from injury  
b. not a significant source of morbidity and mortality  
c. not a risk factor for long-term care admissions  

2. Risk factors for falls in the elderly include:  
a. polypharmacy  
b. increasing age  
c. history of falls  
d. all of the above  

3. Annual screening for falls in the elderly is recommended by:  
a. American Fall Prevention Society  
b. American Geriatrics Society  
c. Medicare  
d. a and b  
e. b and c  

4. Acceptable physical evaluations for falls include:  
a. Time Up and Go Test  
b. Tinetti’s Mobility Scale  
c. Physical Performance Test  
d. all of the above  

5. Which of the following classes of medications has the highest risk of associated falls?  
a. NSAIDs  
b. Benzodiazepines  
c. Statins  
d. Anti-Hypertensives  

6. Vitamin D supplementation is recommended for:  
a. All hospitalized elderly patients  
b. elderly community-dwelling patients  
c. patients at high risk for osteoporosis  
d. b and c  

7. Which of the following is true regarding polypharmacy?  
a. Polypharmacy is the leading cause of falls in the elderly  
b. A patient-centered approach to reducing polypharmacy should be employed  
c. Patients on more than 2 medications are at risk for falls  
d. All of the above  

8. Which of the following exercise programs are most effective in preventing falls?  
a. Balance retraining including tai chi and otago  
b. Swimming  
c. Weight lifting  
d. All of the above  

9. Which of the following is true concerning vision impairment?  
a. All patients should be referred to an ophthalmologist  
b. Patients experiencing vision impairment on screening should receive referrals  
c. Vision correction often decreases falls immediately  
d. All of the above  

10. Which of the following is not a true statement?  
a. Falls in the elderly are quite costly  
b. A thorough history, physical and targeted work up should be initiated on patients at risk of falling  
c. All patients should receive an assistive device such as a cane  
d. Cardiac intervention is appropriate for select patients.