June 26, 2019

The Honorable Susan Collins, Chair
The Honorable Robert Casey, Ranking Member
Special Committee on Aging
United States Senate
G31 Dirksen Senate Office Building
Washington, DC 20510
Submitted electronically at: AnnualReport@aging.senate.gov

Dear Chairmain Collins and Ranking Member Casey,

Thank you so much for the opportunity to respond to your May 15th call for comments to inform the Committee’s annual report. The National Osteoporosis Foundation (NOF) is the leading health organization dedicated to preventing osteoporosis and broken bones, promoting strong bones for life and reducing human suffering through programs of public and clinician awareness, education, advocacy, and research. Established in 1984, NOF is the nation’s only health organization solely dedicated to osteoporosis and bone health. We are delighted that the Committee has chosen to focus its report this year on the important issue of falls and fall-related injury.

NOF strongly agrees with the Committee that a thoughtful analysis of and search for policy solutions to the problem of falls among older Americans has to include an examination of bone health, osteoporosis and bone fractures. **Bone loss and osteoporosis are fundamental underlying contributors to the worst consequences of falls among older Americans – broken and fractured bones, which can lead to disability, loss of independence and even death.** In addition, there are instances where an osteoporotic fracture precedes/causes the fall.

**Background on Osteoporosis**

Before responding to the Committee’s questions, I thought it would be useful to provide some basic information about osteoporosis.

- **Osteoporosis is common.** 1 in 2 women and up to 1 in 4 men over age 50 will break a bone due to osteoporosis. For women, the incidence is greater than that of heart attack, stroke and breast cancer combined. Most of the breaks are the result of falls.
Approximately 10 million Americans age 50 and above have osteoporosis and another 44 million have low bone density, placing them at increased risk for bone fractures.

- **Osteoporosis is serious, even deadly.** Each year Americans suffer approximately 300,000 hip fractures. Approximately 75,000 Americans who break their hip die in the year following the fracture. Another 75,000 move from the hospital to a nursing home and never return to their homes and communities. Most of the remaining 150,000 Americans never regain previous function. Six months after a hip fracture, only 15 percent of patients can walk across the room unaided.

  - Osteoporotic bone fractures are responsible for more hospitalizations than heart attacks, strokes and breast cancer combined.
  - A new soon to be released study finds that in 2015 among traditional Medicare beneficiaries (approximately 69 percent of all Medicare beneficiaries) there were 1.65 million fragility fractures. 15% or 205,000 of them had another (also called repeat or secondary) fracture during the next year.

- **Osteoporosis is treatable, if not preventable.** While the disease is responsible for an estimated 2 million broken bones per year, nearly 84 percent of of older Americans who suffer bone breaks are not tested or treated for osteoporosis. Studies suggest that 50 percent of repeat or secondary fractures could be avoided with cost-effective and well-tolerated treatments.

- **Osteoporosis is costly.** It is estimated that osteoporosis-related bone breaks cost patients, their families and our health care system $52 billion in 2018. Experts predict that by 2040 that cost will rise to over $95 billion a year.

**NOF’s Responses to Questions Posed by the Committee**

1. **Reporting and Follow-Up.**

   More than one out of four older people fall each year, but less than half tell their doctor. Falling once doubles your chances of falling again. Each year, three million older people are treated in emergency departments for fall injuries. Many of the falls result in fractures and need to receive proper evaluation and follow up for diagnosis and possible treatment of osteoporosis. If an individual presents with a fall injury without a fracture, but meets other osteoporosis risk factors, they too should be evaluated. In our following responses we address the mechanisms that can and should be put in place to help reduce the incidence and consequence of multiple falls and fractures in our senior population.
2. **Tools and Resources.**

NOF provides a number of useful tips and resources on best ways for older Americans to protect themselves against falls. These include things that can be done inside and outside the home and safe movement and exercise videos. They can be found at: https://www.nof.org/patients/fracturesfall-prevention/. In addition, the National Council on Aging’s (NCOA) [National Falls Prevention Resource Center](https://www.nof.org/patients/fracturesfall-prevention/) supports the implementation of evidence-based falls prevention programs and serves as a national clearinghouse of tools and best practices.

NOF also provides resources to help educate people about osteoporosis risk factors and provides a checklist of questions to review with their healthcare provider. These materials can be found on the NOF.org website: [https://www.nof.org/preventing-fractures/general-facts/bone-basics/are-you-at-risk/](https://www.nof.org/preventing-fractures/general-facts/bone-basics/are-you-at-risk/) and here: [https://www.nof.org/patients/communication-with-your-doctor/](https://www.nof.org/patients/communication-with-your-doctor/).

3. **Medicare.**

   a. **Welcome to Medicare.** The Welcome to Medicare and the Annual Medicare Wellness visit should provide Medicare beneficiaries with information about bone health and falls prevention. Beneficiaries should be made aware of Medicare’s coverage of bone density screening testing and receive a referral for this screening as appropriate. Medicare quality ratings measures for traditional Medicare and Medicare Advantage should incorporate measures regarding the percentage of beneficiaries provided with information and DXA referral as well as the percentage of high risk individuals who are tested and prescribed appropriate medication.

   **Center for Medicare and Medicaid Innovation (CMMI).** CMMI has rightly focused on identifying and testing practices and payment models that hold promise of improved health care outcomes and bring better value to beneficiaries, their caregivers and taxpayers. Unfortunately, the Primary Care Plus model does not incentivize bone health or secondary fracture prevention. CMS could, for example, provide that the costs of fracture care in at-risk models not be attributed to the provider or accountable entity if they meet certain benchmarks on bone health, e.g., 95% of patients at risk for low bone density have had a DXA, 95% of patients with a fracture after age 50 are evaluated and appropriately treated.

   Given the prevalence and cost to Medicare of bone fractures and substantial evidence that innovative practices can improve outcomes and reduce costs, **the Committee and the Congress should direct CMMI to conduct a Medicare demonstration or pilot program that incentivizes better coordination and management of care, such as through the provision of fracture liaison services, to beneficiaries who have suffered one or more bone fractures and may be at risk for**
additional fractures. (See #4 below for more background on fracture liaison services.)

b. Reasonable Medicare payment rates for Bone Density Screening. Medicare pays for state-of-the-art bone density testing (dual-energy X-ray absorptiometry (DXA)) which is highly effective in identifying those who are at risk of bone fractures allowing for early and effective preventive steps and interventions. This bone density testing is more powerful in predicting fractures than cholesterol is in predicting myocardial infarction or blood pressure in predicting stroke. However, federal policy changes have led to a major reduction in the use of this important preventive service. Medicare payment rates for bone-density tests have been cut by 70 percent resulting in 2.3 million fewer women being tested. And in the last 5 years the osteoporosis diagnosis of older women has declined by 18 percent. Findings of the soon to be released analysis of Medicare payment records by Milliman show that even for those Medicare beneficiaries who have suffered a bone fracture, only 20.8 percent are screened. This is unacceptable.

NOF strongly supports enactment of Chairman Collins’ bipartisan S.239, “Increasing Access to Osteoporosis Testing for Medicare Beneficiaries Act of 2019”. This legislation would set more adequate payment rates for screening and should increase access to this critical preventive service. Based on a 35% fracture prevention rate, we estimate over 26,000 hip fractures could have been avoided if Medicare beneficiaries continued to receive DXA scans. Conservative estimates indicate over 5,200 deaths could have been avoided in the Medicare 65+ population if DXA testing rates had continued to increase as expected.

4. Evidence-Based Practices.

The soon to be released Milliman report commissioned by NOF finds that 18.6 percent of Medicare beneficiaries who fractured their hip in 2015 had a subsequent bone fracture over the next year. Many of these costly and often deadly secondary fractures can be prevented through more effective incentivization and utilization of existing evidence-based practices. There are also models from other health conditions that NOF believes the Committee and the Congress should utilize as effective strategies to reduce the incidence of falls and related bone fractures. One example is the Million Hearts Cardiovascular Disease Risk Reduction Model (please see details below) and another is the Medicare Diabetes Prevention Program (MDPP) Expanded Model.

a. Fracture Liaison Services. Medicare pays for effective screening and effective medication therapies that can substantially reduce the rates of secondary bone fractures tied to osteoporosis. As stated earlier, findings of the soon to be released analysis of Medicare payment records by Milliman finds that even for those Medicare beneficiaries who have suffered a bone fracture, only 20.8 percent are screened. Additionally, despite the availability of pharmacologic therapies for preventing fractures, treatment rates are low, even for the highest risk individuals. The percentage of Americans who have suffered a hip fracture getting medication proven to strengthen and/or regrow bones afterward to prevent another fracture declined from 40.2% in 2002 to just 20.5% in 2011.
Medicare does not pay for an innovative care coordination strategy known as Fracture Liaison Service (FLS) that has been demonstrated to improve utilization of effective screening and therapies and therefore improve outcomes and reduce costs. This care coordination program could also be used for chronic care management of osteoporosis and reimbursed as such. The Fracture Liaison Service (FLS) secondary fracture prevention program model of care has been in operation for more than 15 years in leading health systems in the U.S. and in countries around the world. FLS ensures that patients suffering fractures caused by osteoporosis undergo a fracture risk assessment to prevent further fractures by treatment of osteoporosis and falls prevention strategies, delivering highly effective care while significantly reducing the costs associated with secondary fractures. FLS operates under the supervision of osteoporosis specialists and collaborates with the patient’s primary care physician. Usually led by nurse practitioners or other allied health professionals, it ensures older adult fracture patients receive appropriate diagnosis and treatment of their likely osteoporosis. The program creates a population registry of fracture patients and establishes a process and timeline for patient assessment and follow-up care. In addition to managing osteoporosis, where appropriate, FLS programs will refer patients to falls prevention services.

Numerous studies have demonstrated the effectiveness of FLS. For example, Kaiser Permanente has found that its FLS program has reduced the hip fracture rate expected by over 40% (since 1998). If implemented nationally, Kaiser estimates a similar effort could reduce the number of hip fractures by over 100,000 and save over $5 billion/year. Geisinger Health System reports that it achieved $7.8 million in cost savings from 1996-2000 from its implementation of FLS.

The soon to be released Milliman report for NOF finds that if Medicare were to provide all Medicare beneficiaries who have suffered a fracture access to FLS, savings to the Medicare program between $281 million to $1.1 billion a year could be realized.

A recent meta-analysis of 159 publications evaluating the impact of fracture liaison services found that compared with patients receiving usual care (or those in the control arm), patients receiving care from an FLS program had higher rates of bone density testing (48.0% vs 23.5%), treatment initiation (38.0% vs 17.2%) and greater adherence to treatment (57.0% vs 34.1%).


NOF calls on the Committee and the Congress to pass legislation that would pay for FLS services for those beneficiaries who have suffered a bone fracture. The experience of major U.S. health systems and economic analyses indicate that such a change would substantially improve outcomes for older Americans and reduce unnecessary costs to older Americans, their caregivers and the Medicare program.
b. **A Proven Success: Million Hearts Campaign.** Studies have shown that just over 20% of older Americans who break their hip are started on FDA approved therapies to strengthen their bones. This compares to 96 percent who are started on beta blockers post hospitalization for a heart attack. The soon to be released Milliman report finds that 18.6 percent of Medicare beneficiaries who fractured their hip in 2015 had a subsequent bone fracture over the next year. By comparison, those who are hospitalized for an acute myocardial infarction are at a 9.2 percent risk for another AMI related hospitalization in the next year. An innovative national campaign, Million Hearts, has had a very positive impact on improving care and outcomes aimed at reducing heart disease. **NOF urges the Committee and the Congress to direct the Department of Health and Human Services to develop and implement a similar national education and outreach initiative aimed at reducing falls and bone fractures among older Americans. Such an initiative could set national goals for primary and secondary prevention of osteoporosis and reductions in the rate of falls and primary and secondary bone fractures.**

Million Hearts® 2022 is a national initiative co-led by the Centers for Disease Control and Prevention (CDC) and the Centers for Medicare & Medicaid Services (CMS) to prevent 1 million heart attacks and strokes within 5 years. It focuses on a small set of priorities selected for their ability to reduce heart disease, stroke, and related conditions. CDC’s Division for Heart Disease and Stroke Prevention provides leadership and support for the Million Hearts® initiative. The agency collaborates extensively with CMS, sets priorities, and leads the communications, partnership development, research, translation, and evaluation efforts for the initiative. In addition, CDC:

a. Posts information and evidence-based tools on the Million Hearts® website.
b. Shares information and best practices with private and public partners through webinars, conferences, and newsletters.
c. Uses clinical quality measures and public health surveillance to monitor progress.
d. Supports the efforts of partners and recognizes partners that achieve or exceed specific targets.
e. More information about past and current activities of the Million Hearts campaign can be found at: https://millionhearts.hhs.gov/files/MH_At_A_Glance_2022-508.pdf

5. **Post-Fracture Care.**

As noted in our response to your question about best practices, there are several policy changes that could be made to create a care pathway to better ensure proper follow up care for those who suffer bone fractures and help them prevent additional fractures. Medicare payment for improved coordination of care and the development and implementation of improved quality measures are two effective steps that would greatly improve outcomes.
a. **Fraction Liaison Service.** As noted above, Medicare does not pay for an innovative care coordination strategy known as Fracture Liaison Service (FLS) that has been demonstrated to improve utilization of effective screening and therapies and therefore improve outcomes and reduce costs. The Fracture Liaison Service (FLS) secondary fracture prevention program model of care has been in operation for more than 15 years in leading health systems in the U.S. and in countries around the world. FLS ensures that patients suffering fractures caused by osteoporosis undergo a fracture risk assessment to prevent further fractures by treatment of osteoporosis and falls prevention strategies, delivering highly effective care while significantly reducing the costs associated with secondary fractures. FLS operates under the supervision of osteoporosis specialists and collaborates with the patient’s primary care physician. Usually led by nurse practitioners or other allied health professionals, it ensures older adult fracture patients receive appropriate diagnosis and treatment of their likely osteoporosis. The program creates a population registry of fracture patients and establishes a process and timeline for patient assessment and follow-up care. In addition to managing osteoporosis, where appropriate, FLS programs will refer patients to falls prevention services.

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b. **Quality Measures.** A recent seminal analysis by noted experts found that policy-driven expansion of case findings and treatment of at-risk women could substantially lower the toll imposed by broken bones due to osteoporosis. It found
that policy changes could prevent 6.1 million fractures over the next 22 years while reducing payer costs by $29 billion and societal costs by $55 billion (Lewiecki, Harmon, doi: 10.1002/jbm4.10192). One such policy change noted by these experts is the implementation of quality measures linking higher reimbursement for increased use of beneficial interventions. There has been discussion of creation and adoption of quality metrics in osteoporosis to encourage use of DXA and treatment in patients at higher risk, such as those who have experienced a prior fracture, those with other clinical risk factors, and those with low BMD.

Thank you so much for the opportunity to share our views on this very important topic. We look forward to continuing to work closely with the Committee as its work progresses. Please contact me if you have any questions or we can be of further assistance. We will share a copy of the upcoming Milliman report in the next few weeks when it becomes available.

Sincerely,

Elizabeth Thompson
CEO