



**Statement of**

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**Before the**

**U.S. Senate Special Committee on Aging**

**Hearing On**

**"Falls Prevention: National, State, and Local Solutions to Better Support Seniors"**

**October 16, 2019**

Good Morning Chairman Collins and Ranking Member Casey. Thank you so much for calling this hearing today and for the opportunity to present to the Committee on a vitally important topic that literally impacts every American in one way or another. And thank you Madame Chairman for your longstanding and outstanding leadership on bone health issues. It is truly appreciated!

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 or causes the fall.

In the U.S. more than 55 million people either already have osteoporosis or are at high risk of the disease due to low bone density. ***Osteoporosis-related bone fractures – often the result of falls -- are responsible for more hospitalizations than heart attacks, strokes and breast cancer combined.*** And as the nation ages, the number of osteoporotic fractures suffered annually will grow 68% by 2040, exacting an even greater economic and human toll on Medicare beneficiaries, their caregivers and taxpayers.

It gets blurry at times talking about numbers. But we have to keep individual patients and their stories front and center. Take the story of NOF patient advocate Claudia Kaufman of Washington, D.C. Claudia is 65. She has osteoporosis and has suffered multiple bone fractures. She fell on a curb and shattered her shoulder May 2010. She has broken 3 toes getting in and out of the bathtub. In November 2015 she slipped on wet boards and fractured her wrist when catching herself in the fall. She recently learned that after her first fracture -- in 2008 -- she had a screening that showed she had osteopenia -- a precursor to osteoporosis. But her doctor never followed up to give her the results. She says that if she had been told, she could have started treatment earlier and possibly avoided the repeat fractures. Because she had such a bad fracture, she will need a shoulder replacement. She has been a lifelong swimmer, and just a few weeks ago, she was given the news that she likely can't swim again.

So as we discuss the issues today, we have to keep in mind Claudia and the millions of other Americans she represents.

The good news is that we have the tools to stem this crisis. Medicare pays for state of the art bone density testing to identify those who are at risk of bone fractures, allowing for early and effective preventive steps and interventions. Medicare also pays for FDA approved drug treatments for osteoporosis that can help reduce spine and hip fractures by up to 70 percent and cut secondary (repeat) fractures by about half. And leading health systems like Geisinger and Kaiser Permanente have successfully employed new models of coordinated care for those with bone fractures to significantly improve rates of screening and treatment, reduce rates of fractures *and lower costs*.

We are pleased today to be able to brief the Committee on the results of a major new report commissioned by NOF examining the economic and clinical impact of bone fractures suffered by Americans in the Medicare program. The analysis also provides insights on potential savings to Medicare that could be realized if the rate of secondary (repeat) fractures were reduced through model prevention practices. The report, prepared by the independent actuarial firm Milliman, is based on their review of an extensive database of Medicare fee for service claims paid in 2015. The full report can be found [here](#).

The report finds that bone fractures related to osteoporosis (“osteoporotic fractures”) take a dramatic economic and human toll on our nation, but that reducing a small fraction of secondary fractures could yield large savings to Medicare:

- Approximately 2.3 million fractures were suffered by 2 million Americans on Medicare in 2015.
- The additional costs to Medicare just for the 307,000 who suffer a second fracture in the 2-3 years after an initial fractures was over \$6.3billion.
- Only 9 percent of women who suffered a fracture were screened for osteoporosis, while most were not receiving approved treatments or model care coordination practices.
- Over 40% of Medicare beneficiaries with a new osteoporotic fracture were hospitalized within a week after their fracture and nearly 20% died within 12 months following a new osteoporotic fracture.
- It concludes that reducing just 20 percent of these “secondary” fractures by employing best practices could reduce Medicare spending by over \$1.2 billion over up to 2 to 3 years.

## Osteoporotic Fractures are Widespread and Costly

- Up to 2.3 million osteoporotic bone fractures were suffered by Medicare beneficiaries in 2015. *That is more than the number of heart attacks, strokes or new cancer cases.* Approximately 1.4 million beneficiaries (or about 4% or in 1 of every 25) in the traditional Medicare fee-for-service (FFS) program suffered over 1.6 million fractures. And an estimated 600 thousand beneficiaries in Medicare Advantage plan suffered up to 700,000 fractures.
- The incremental annual medical costs in the year following a new osteoporotic fracture was over \$21,800, which included only direct costs identifiable through an administrative medical claims database.
- An estimated 307,000 Medicare FFS beneficiaries of those who had a new osteoporotic fracture, suffered one or more additional subsequent fractures within two three years. The estimated incremental medical cost to Medicare of a subsequent fracture over the 180-day period following a new osteoporotic fracture was over \$20,700 which would account for **over \$6.3billion** in allowed cost to Medicare.
- Total costs to Medicare and patients are actually substantially higher because the Milliman analysis **does not** include costs incurred by:
  - the roughly 30 percent of Medicare beneficiaries who get their care through Medicare Advantage Plans;
  - prescription drug costs paid through Medicare Part D, or
  - long-term care costs not covered by Medicare (mostly covered by Medicaid).
- In keeping with this, the report cites a peer-reviewed study from earlier this year which estimates the total annual expense of providing care for osteoporotic fractures among Medicare beneficiaries, including direct medical costs as well as indirect societal costs related to productivity losses and informal caregiving to be **\$57 billion in 2018 growing to over \$95 billion in 2040.**<sup>i</sup>

## Osteoporotic Fractures Exact a Major Human Toll

Among the report's detailed findings on the health and human toll of osteoporosis on older Americans:

- Over 40% of Medicare beneficiaries with a new osteoporotic fracture were hospitalized within a week after their fracture. Of those with a hip fracture, over 90% were hospitalized within a week.
- 19 percent of Medicare beneficiaries with a new osteoporotic fracture developed at least one pressure ulcer within three years of their initial fracture.
- 7 percent of Medicare beneficiaries with a new osteoporotic fracture became eligible for Medicaid within 3 years of their bone fracture.
- Nearly one in five Medicare beneficiaries died within 12 months following a new osteoporotic fracture. This accounted for approximately 260,000 deaths among Medicare beneficiaries who suffered an osteoporotic fracture in 2015. Of these, about 164,000 were female and 96,000 were male. 30 percent of those with hip fractures die within 12 months of their fracture.

### **Tools to Prevent Fractures Go Unused**

The study also documents the failings of our health care system to utilize available tools that are proven to reduce the number of fractures, particularly repeat fractures.

- Although dual-energy X-ray absorptiometry (DXA) is highly effective at identifying at-risk individuals and is recommended for all women age 65 years and older, the report found that only 9% of female Medicare FFS beneficiaries received a BMD test within six months following a new osteoporotic fracture.
- While Milliman’s analysis did not include a review of Medicare Part D claims, the report cites a 2019 peer-reviewed finding that “while Medicare covers effective screening and treatments, the percentage of patients aged 50 and older, with either commercial or Medicare supplemental health insurance, who received a registered therapy for osteoporosis within twelve months of a hip fracture has **declined in the U.S. from 40% in 2002 to 21% in 2011.**”<sup>i</sup>
- The report finds that innovative care coordination models such as fracture liaison services (FLS) utilized by leading systems like Geisinger and Kaiser and in many other countries to reduce the rate of secondary osteoporotic fractures are not widely utilized in the United States.
- The report does cite a promising trend in improving rates of screening and treatment of those in Medicare Advantage (MA) plans. Average MA rates of testing and/or treatment for women within six months post-fracture, which include both BMD testing and

pharmaceutical therapies, are approximately 45% for 2017. Medicare Advantage plans receive bonus payments if they meet quality measures for higher rates of treatment or screening after bone fractures.

### **Preventing Secondary Fractures Would Bring Big Savings**

- The report finds that preventing even a modest percentage of subsequent fractures after a new osteoporotic fracture may lead to Medicare cost savings. It estimates that reductions of 5% to 20% in the rate of subsequent fractures could lead to savings of \$310 million to over \$1.2 billion for the Medicare FFS program during a follow-up period of up to 2 to 3 years after a new osteoporotic fracture.

### **A Call to Action: Policy Changes Needed To Move Us Forward**

The National Osteoporosis Foundation is putting forward a call to action to the nation to make the needed policy changes to address the crisis in osteoporosis. NOF calls for the following changes based on the report's findings:

- ***Medicare and other payers should incentivize and promote the provision of evidence-based care management and coordination such as fracture liaison services for those who have suffered a bone fracture and are at risk for another.***

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.

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%). <https://www.ncbi.nlm.nih.gov/pubmed/29555309>

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 second 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, **Congress should direct CMMI to conduct a Medicare demonstration or create a bundled payment model 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.**

- ***Cuts to Medicare payment rates for osteoporosis screening should be restored so as to better encourage appropriate utilization of this proven way to reduce fracture rates.***

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. 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.

- ***Appropriate quality measures for both optimal screening and treatment of osteoporosis and bone fractures should be established, adopted and incentivized by Medicare and other payers.***

NCQA measures for follow up care for those who suffer fractures should be strengthened and incentive by Medicare. Current Medicare Advantage Star rating measure related to post-fracture care should be improved by creating separate measures for high-rates of post-fracture screening and *and* appropriate drug therapy treatment and adherence. The current measure is of more limited impact in incentivizing best practices because it measures the percentage of women age 65-85 who had *either* a bone mineral density test *or* a prescription for a drug to treat osteoporosis within 6 months of their bone fracture. There should be separate measures for appropriate screening and appropriate treatment. Similar measures should be established and incentivized for traditional Medicare. The President's October 3 Executive Order calls on HHS to consider quality measures similar to Medicare Advantage Star Ratings for traditional Medicare. This may provide an important opportunity.

- **A national education and action campaign should be launched to raise awareness about and promote action to reduce the rate of falls and bone fractures.**

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 NOF 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 calls on Congress to direct and fund the Department of Health and Human Services to implement a similar national education and action 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. 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](https://millionhearts.hhs.gov/files/MH_At_A_Glance_2022-508.pdf)

These steps along with others called for in the Committee's excellent report being released today, provide a roadmap for improving and savings lives and lowering health care costs.

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.

I look forward to any questions you may have.

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<sup>1</sup> Lewiecki EM, Ortendahl JD, Vanderpuye-Orgle J, et al. Healthcare Policy Changes in Osteoporosis Can Improve Outcomes and Reduce Costs in the United States. *JBMR Plus*. May 2019. doi:10.1002/jbm4.10192