



NATIONAL BONE HEALTH ALLIANCE
STRONG BONES AMERICA



A CME Educational Plan and Patient Education Grant Request

**Bridging the Osteoporosis Screening, Diagnosis and
Treatment Gap in Primary Care**

Submitted to:

Amgen Inc.

Jointly submitted by:

National Bone Health Alliance

and

American Academy of Family Physicians

Executive Summary

Osteoporosis is a major public health threat in the United States and around the globe. As of 2010, 10.2 million adults have osteoporosis and another 43.4 million have low bone mass, a figure expected to rise nearly 30 percent by the year 2030. Osteoporosis is the major cause of fragility fractures, which are from low trauma not likely to occur in healthy bone, in the population age 50 and above.

As osteoporosis prevalence increases parallel to an aging American population, the number of fragility fractures may increase from 2 million in 2005 to 3 million in 2025. Fragility fractures cause substantial pain and severe disability, often leading to a reduced quality of life. In addition, hip and vertebral fractures are associated with decreased life expectancy. Patients who have had any one fracture have an increased risk of subsequent fractures.

Luckily, osteoporosis is a preventable disease that can be diagnosed and managed before any fracture occurs. In patients who have already experienced a fracture, the appropriate use of available therapies can effectively decrease the risk of future fractures by up to 50 percent. Yet osteoporosis is underdiagnosed and undertreated in the United States, and secondary fracture risk is poorly addressed in patients who have sustained a first fracture.

The National Bone Health Alliance (NBHA) and the American Academy of Family Physicians (AAFP) propose a multi-faceted continuing medical initiative to address the identified knowledge and practice-based gaps in primary care on the topic of osteoporosis. This initiative will span two years and include both live and online educational activities.

Recognizing the importance of patient education, the NBHA and the AAFP Health of the Public and Science Division will co-develop educational content for patients to access through familydoctor.org. Content will adhere to AAFP evidence-based policies and be at the health literacy level appropriate for the patient audience.

NBHA and AAFP request from Amgen a continuing medical education grant of \$355,737 to fund Bridging the Osteoporosis Screening, Diagnosis and Treatment Gap in Primary Care.

Assessment of Gaps and Needs

This needs assessment identifies specific gaps in care that will be addressed in the proposed primary care osteoporosis continuing medical education activity.

Evidence for the needs assessment originates from the following sources:

- Primary and secondary literature reviews and analyses
- Expert opinion
- Guidelines
- Health statistics from government sources
- Consensus statements
- Family physician surveys and focus group summary reports
- Audience response system data from AAFP conference sessions

Scope of the Problem

Osteoporosis is a debilitating systemic skeletal disorder characterized by low bone mineral density (BMD), deterioration of bone tissue, disruption of bone microarchitecture, and subsequent bone fragility that increases the risk of fracture. In 2013, the National Bone Health Alliance (NBHA) recommended expanding the diagnostic criteria of osteoporosis beyond osteopenia.¹ The Alliance recommended a diagnosis of osteoporosis in the presence of any of the following:

- BMD T score ≤ 2.5 at the hip (total hip or femoral spine) or lumbar spine
- Qualifying low-trauma fracture
 - Low-trauma hip fracture irrespective of BMD, or
 - Low-trauma spine, proximal humerus, pelvis, and some wrist fractures in the presence of low BMD
- FRAX score \geq recommended treatment intervention cut points in the presence of low BMD

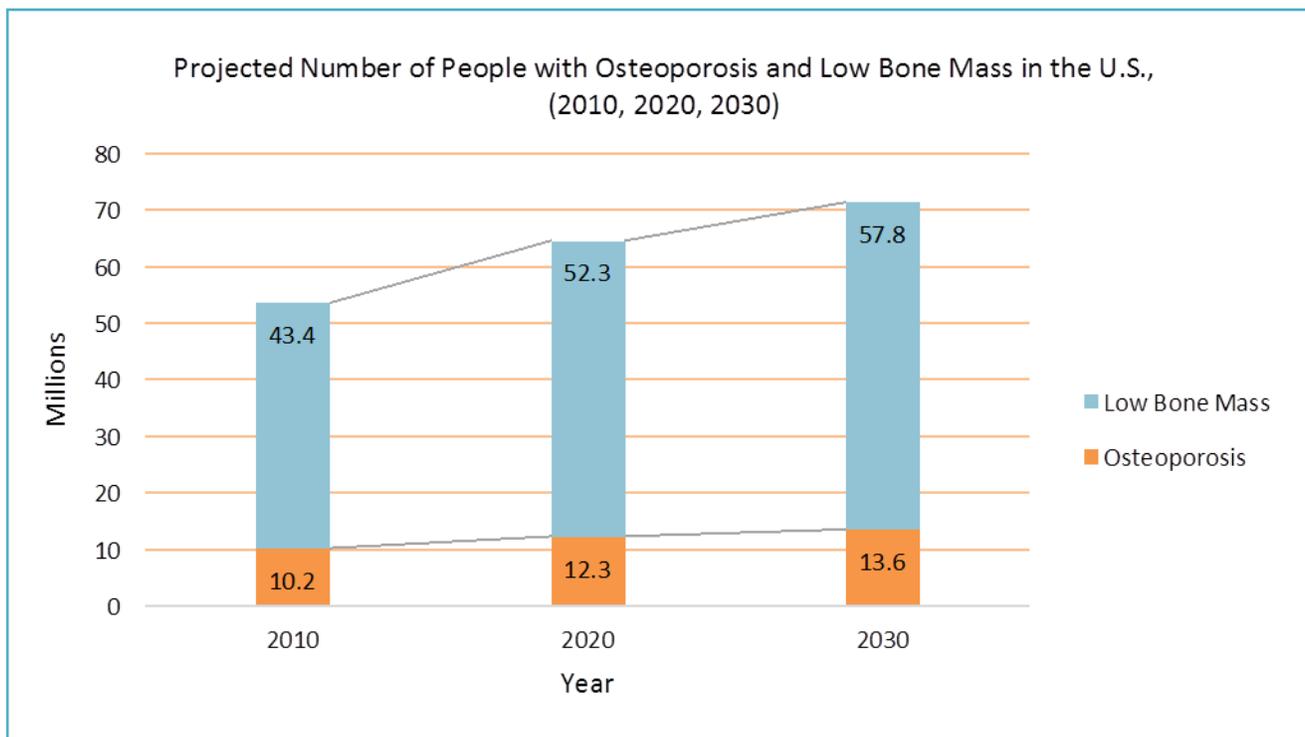


Figure 1.⁵

The addition of a history of fracture and a fragility fracture in the absence of low BMD to the diagnostic characteristics of osteoporosis brings the United States up-to-date- with international guidelines.² It has also dramatically increased prevalence calculations of osteoporosis.

As of 2010, an estimated 10.2 million people have osteoporosis and 43.4 million have low bone mass. More than one half of the fractures among both men and women occur in those with low bone mass, a finding consistent with previous studies performed among postmenopausal women.¹⁹ While advances in medicine have largely compressed morbidity from life-threatening disease into the very latter years of life,³ osteoporosis is a chronic condition that emerges in middle age and progresses in severity as a person ages. While 46% of men and 77% of women age 80 and over are osteoporotic,⁴ 16% of men and 30% of women age 50 and over have osteoporosis.

The aging of America has serious public health implications. By 2030, 13.6 million people will have osteoporosis and 57.8 million will have osteopenia (Figure 1).⁵ Much of the growth of the segment of the population aged 65 and over is projected to occur between now and 2030 as baby boomers age. The U.S. Census Bureau estimates their number will reach 81 million in 2040, more than twice what it was in 2010, increasing from 13% to 20% of the total national population. Signs of this impending swell are already evident. Ten thousand baby boomers have been turning 65 years old every day since 2011. The first baby boomers will turn 85 in 2031, and by 2050 their numbers will expand 3-fold to 19 million. Already the 85 years and older age segment is the fastest growing age group of the population.⁶

Osteoporosis is a silent disease that progresses without evidence of symptoms until a fracture occurs. Fragility fractures are responsible for considerable pain and suffering, severe disability, reduced quality

of life, and use of long-term care and rehabilitation resources.⁷ The leading cause of the loss of independence in men or women 70 years of age and older are fragility fractures due to falls at home.⁸ Most patients do not regain their pre-fracture functionality or independence and many are permanently limited in mobility, ability to fulfill social roles, and performance of activities of daily living and self-care.⁹ Psychological consequences have also been noted, such as loss of self-efficacy, depression, and anxiety.¹⁰

The economic burden due to osteoporotic fractures is high and will escalate as the population ages. Overall, the medical cost of osteoporosis and related fractures is estimated to be \$20 billion per year. The annual cost in the U.S. of caring for osteoporotic-related fractures alone parallels or exceeds the annual cost for myocardial infarction, breast cancer, and/or cerebrovascular accidents.¹¹ Direct costs are predicted to escalate to \$25 billion by 2025 and \$50 billion by 2050 due to the increase in incidence of osteoporotic fractures.¹²

In the U.S., two million osteoporotic fractures occur every year. One of two women and one of five men will sustain an osteoporotic fracture in their lifetime.¹³ For women over 50 years, the lifetime risk of a fracture is higher than the combined risk of developing cervical, uterine or breast cancer, while men over 50 it is higher than risk of developing prostate cancer.¹⁴ The incidence rates of fragility fracture due to osteoporosis at all skeletal sites increase with advancing age in both women and men, with those 85 years and older at highest risk.¹⁵

Furthermore, an initial fragility fracture increases the absolute risk of sustaining future fractures for both men and women.¹⁶ An individual who sustains a fracture is 86% more likely to sustain a fracture of another type.¹⁷ For men, although their risk for an initial fracture is lower than that of women, once they sustain an initial fracture, their risk for additional fractures escalates to the same level of risk for subsequent fracture as women in their age group. For women, an initial fracture increases their risk for subsequent fracture as high as or higher than the initial fracture risk carried by women in the ten-year age group above theirs. Research has demonstrated increased risk for future fracture applies to virtually all clinical fracture sites, is highest immediately after the initial event, and persists for up to ten years.¹⁸

Premature mortality associated with fracture, particularly following hip and vertebral fractures is well documented^{19,20} and evidence of elevated mortality risk following other types of osteoporotic fractures is mounting.¹⁹ Risk of death is most pronounced in the first three to six months after sustaining a fracture and the risk increases substantially with subsequent fractures.²¹ The cumulative incidence of adverse outcomes following all low-trauma fractures leads to the death in 39% women and 51% men within five years and excess mortality related to fracture can extend up to ten year. These mortality rates far exceed that expected for an age- and sex-matched population (24% in women and 27% in men).²²

Gaps in Care

Osteoporosis is a preventable disease that physicians can diagnose and manage in the early stages of low bone mass. Recognition of individuals at risk for osteoporosis is imperative for reducing morbidity and mortality associated with osteoporosis-related fractures. Yet osteoporosis is vastly underdiagnosed and undertreated in the United States contrary to recommendations for universal screening and treatment guidelines by the National Osteoporosis Foundation²³ and the United States Preventive Services Task Force.²⁴ The following four gaps in patient care identified by this needs assessment will be addressed in our proposed continuing medical education activity.

Gap 1: Failure to follow guidelines for screening for osteoporosis

Based on analysis of medical claims data collected from a large, nationwide cohort between 2008 and 2014, screening rates among privately insured women ages 50+ were persistently low. Only 26.5% women in the age group 65 to 79 and 12.8% women 80 years and older underwent bone mass

measurement. Even lower utilization rates were seen among non-Hispanic black women and women of low socioeconomic status.²⁵

There is also evidence that physicians who do screen may not be following recommended diagnostic guidelines and may be basing treatment decisions on incorrect assumptions. A recent analysis of five years of electronic health and radiological records at a regional health care system revealed two-thirds of women receiving new medication prescriptions for osteoporosis therapy did not need treatment. The diagnosis of osteoporosis was based on dual-energy X-ray absorptiometry (DXA) abnormalities of lateral lumbar spine bone mineral density, which is not a diagnostic site according to the International Society of Clinical Densitometry guidelines. In fact, one half of the women being treated may not have qualified for screening at all, because they were of younger age and had no risk factors for osteoporosis.²⁶ Another study found that family physicians order bone densitometry and try to manage osteoporosis appropriately but lack a rationale for testing.²⁷ Surveys on physicians' learning needs indicate the majority (66.8-83.2%) want to be informed about criteria for ordering and the interpretation of densitometry reports and T-scores and the frequency of testing.^{28,29}

Physicians need information regarding who and when to test, guideline-based diagnostic criteria and indications for testing, and information on how to interpret tests.

Objective 1: Recognize guideline-based recommendations for osteoporosis screening and bone mineral density testing.

Outcome 1: Providers will recognize when, who, and how to assess for fracture risk and osteoporosis.

Outcome 2: Providers will be able to interpret assessment results to develop a patient care plan.

Gap 2: Failure to treat patients who sustain a fragility fracture to reduce risk of future fracture

Early aggressive treatment intervention after a first low-trauma fracture, especially in those with low bone density, can reduce the risk of additional fractures and associated premature mortality. However, disturbing data show that the percentage of patients receiving a treatment for osteoporosis, even after sustaining a hip fracture, has declined in the United States from 41% in 2001 to 21% in 2011.³⁰ These numbers demonstrate a low participation of physicians in their patients' secondary fracture prevention.

One reason for this decline is patient and physician concern regarding potential drug toxicities of bisphosphonates and other anti-osteoporosis medications. However, these adverse events are rare, and the benefits for patients at risk for subsequent fractures are high.³¹ Nonetheless, physicians unfamiliar with the safety profiles of osteoporosis medications are reluctant to prescribe them to fracture patients. In one study, nearly all family physicians surveyed indicated they would be more likely to treat elderly fracture patients with medication if they had a safe medication shown to reduce patients' risk of recurrent fracture³² despite the high benefit-to-risk ratio of available interventions.³³ In addition, surveys demonstrate physicians are confused about available medications for osteoporosis, particularly when to start treatment, adequate dosing, how to decide which drug to prescribe, and how to manage patients who are at moderate-risk for fracture.^{27,29}

Physicians need information regarding the range of anti-osteoporotic agents available for treatment and how to select the appropriate one for each patient, drug safety profiles, dosing instructions, timing of initiation of medication, and how to treat patients at moderate-risk for fracture.

Objective 2: Identify the risks and benefits of pharmacological agents for patients with osteoporosis.

Outcome 3: Recognize appropriate individualized treatment interventions for osteoporotic patients, based on evidence-based guidelines and drug safety profiles.

Gap 3: Poor physician-patient communication regarding risks of osteoporosis and fracture

Multiple studies demonstrate women tend to underestimate their risk of becoming osteoporotic and are less concerned about the consequences of osteoporosis than other diseases. Among women who have

multiple FRAX risk factors, a diagnosis of osteoporosis, and take osteoporosis prescription medication, one-third did not believe they were at an increased risk for future fracture.^{33,34} Even when patients have had fragility fractures, more than half do not link their fractures with osteoporosis even when told they have the disease, nor do they appear to understand they are at increased risk for future fracture.³⁵ Patient education on low bone mass and osteoporosis is imperative for long-term management of osteoporosis and fracture prevention. It is crucial for physicians to communicate to patients that a diagnosis of osteoporosis, increasing age, or a fragility fracture increases the risk of future fracture. However, surveys and focus groups indicate primary care physicians feel there are barriers to communicating with elderly patients about the complexity of osteoporosis risk and fracture prevention, which include time constraints, the complexity of their other health problems, and their reluctance to add new medications to long lists of prescribed therapies.^{27,29}

Physicians need training to enable them to provide clear physician-patient communication and patient education that can help patients understand their risk, empower them to actively participate in shared decision-making, and support self-care and medication adherence and persistence.³⁶

Objective 3: Provide patient education and communication to increase shared-decision making.

Outcome 4: Provide patient education on disease awareness and risks, and identify resources for further education, including non-pharmacological interventions.

Gap 4: Poor follow-up after prescribing osteoporosis medications

Several classes of effective drugs are available to treat osteoporosis. To be effective, these drugs must be taken consistently and long-term. Analysis of prescribing information has shown that the relative risk of fracture is 26% lower among adherent versus non-adherent patients, and 21% lower in persistent versus non-persistent patients.³⁷ As with other medications for chronic illnesses, adherence and persistence for anti-osteoporotic drugs is suboptimal. Over 50% of patients who are prescribed osteoporosis medications are either poorly adherent or poorly persistent with treatment within 12 months.³⁸ The risk of side effects and discontinuation is higher in the early months of therapy following the initiation of medication.

Confounding this problem is evidence that physicians routinely overestimate patient adherence to osteoporosis medication therapies and tend to have a poor understanding of patients' concerns leading to non-adherence. While physicians believe the experience of side effects and affordability are top reasons for non-adherence,^{39,40} studies demonstrate patients' reasons for non-adherence include fear of side effects, lack of perceived benefits of medication, complex dosing requirements, and insufficient awareness of disease-related consequences.⁴⁰ Recent systematic reviews of interventions to improve adherence and persistence with osteoporosis medication have identified clear trends regarding the interaction between the study subjects and the health care provider, including:

- early identification of patient with low compliance and persistence
- definition of a shared management strategy with the objective of improving patients' adherence
- application of standard strategies to all patients to avoid risks of interruption or suspension of the therapy.

However, studies indicate that prescribing physicians are not seeing their patients within the time frame considered most effective to prevent non-adherence during which they could address side effects, clarify instructions regarding dosing, and educate patients on the benefits of osteoporosis medications.⁴⁰

Shortening time between initial prescription of therapy and follow-up and improving physician awareness of medication non-adherence and poor persistence to anti-osteoporotic medications may facilitate physician-patient dialogue, with the aim of reducing the risk of fracture.

Objective 4: Develop strategies to increase patient adherence to their care plan.

Outcome 5: Recognize issues related to patient non-adherence to their care plan.

Summary

Osteoporosis is a preventable disease that can be diagnosed and managed before any fracture occurs. In patients who have already experienced a fracture, the appropriate use of available therapies can effectively decrease the risk of future fractures. However, osteoporosis is significantly underdiagnosed and undertreated in the United States and fracture risk is poorly addressed in patients who have sustained a first fracture. This needs assessment has identified four gaps in care that will be addressed in our proposed continuing medical education activity.

Educational Plan; Bridging the Osteoporosis Treatment Gap in Primary Care		
ACGME Core Competencies: Medical Knowledge Patient Care Interpersonal and Communication Skills		Learning Objectives: <ol style="list-style-type: none"> 1. Recognize guideline-based recommendations for osteoporosis screening and bone mineral density testing. 2. Identify the risks and benefits of pharmacological agents for patients with osteoporosis. 3. Provide patient education and communication to increase shared-decision making. 4. Develop strategies to increase patient adherence to their care plan.
Professional Practice Gap	Outcomes Being Measured	Outcome Level and Method
Gap 1: Failure to follow guidelines for screening for osteoporosis resulting in higher risk for secondary fractures.	<ul style="list-style-type: none"> • Providers will recognize when, who, and how to assess for fracture risk and osteoporosis. • Providers will be able to interpret assessment results to develop a patient care plan. 	<i>Live and online activities:</i> <ul style="list-style-type: none"> • Level 3; Knowledge: Case-based Pre- and Post-test • Level 4; Competence: Case-based pre- and post-test; Commitment to Change statements
Gap 2: Failure to treat patients who sustain a fragility fracture to reduce risk of future fracture.	<ul style="list-style-type: none"> • Recognize appropriate individualized treatment interventions for osteoporotic patients, based on evidence-based guidelines and drug safety profiles. 	<i>Online activity only:</i> <ul style="list-style-type: none"> • Level 5; Performance: Translation to Practice (t2p)
Gap 3: Poor physician-patient communication regarding risks of osteoporosis and fracture.	<ul style="list-style-type: none"> • Provide patient education on disease awareness and risks, and identify resources for further education, including non-pharmacological interventions. 	
Gap 4: Poor follow-up after prescribing osteoporosis medications which leads to poor adherence and suboptimal patient outcomes.	<ul style="list-style-type: none"> • Recognize issues related to patient non-adherence to their care plan. 	

Physician Educational Formats & Learning Modalities

This educational initiative will include two delivery methods: live sessions at the AAFP Family Medicine Experience (FMX) (2018 and 2019) and a Dynamic E-Learning Package, an engaging online experience. Each activity will address the proposed learning objectives and measurable outcomes to provide consistency and longitudinal outcomes data. Outcomes from each activity will be analyzed, and will inform the design of future activities. Changes in guidelines, and other health and treatment environment issues will also be observed, and these may contribute to changes in educational objectives, messages, and measurable outcomes.

Family Medicine Experience (FMX)

The AAFP FMX is a transformative live experience where family physicians are provided a forum for the exchange of information and ideas on current practice trends, evidence-based medicine and the delivery of high-quality, equitable and cost-effective care. Each year, AAFP FMX offers courses in a wide variety of clinical topics for continuing medical education (CME) credit. In 2016 FMX offered 136 topics, during 363 sessions, taught by 91 faculty, with 3,788 physicians (members and non-members) and 170 Other Healthcare Professionals in attendance.

2018 FMX will take place October 9 – 13 in New Orleans, LA.

2019 FMX will take place September 24 – 28 in Philadelphia, PA.

FMX Learning Objectives

The AAFP FMX supports the strategic priorities of the AAFP. The AAFP Curricular Framework defines the core priorities for which content is created. AAFP education is based upon gaps in professional practice as determined through needs assessments conducted as a fundamental part of CME activity planning. AAFP CME provides a forum for the exchange of information and ideas on current practice trends, evidence-based medicine, and the delivery of high-quality, equitable and cost-effective care.

FMX Delivery Format; Interactive Lecture

The majority of the education provided at FMX is in the form of interactive lecture. The 60-minute interactive lectures provide learners with an engaging educational experience. These sessions will be facilitated by a family medicine physician and a bone health specialist, and will be aimed at providing new knowledge, competencies, and skills that learners can apply immediately to practice with the ultimate goal of improving patient care. Learners will use their Wi-Fi enabled device to engage with expert faculty and each other by responding to polling questions throughout the session. Additionally, learners will be able to submit questions in real time through their mobile device, to be answered during the Q&A portion of the session. If a learner sees a question that they would like to have addressed, they vote for it, and the list of questions is automatically sorted by popularity.

FMX On Demand

Some sessions are chosen as FMX On Demand sessions. FMX attendees will benefit from FMX On Demand with their paid registration. FMX On Demand is an online library with 25 hours of CME-eligible sessions from the FMX event. FMX attendees receive access to the most popular CME sessions and earn up to 25 AAFP prescribed CME credits.

Features include:

- **Slides with synchronized audio** available online from any computer, tablet, or smartphone.
- **Quiz Yourself** function allows learners to test their knowledge throughout the presentation as if they were at the live event.
- **Portable USB drive** also allows learners to access sessions without an internet connection.

The 2016 On Demand sessions expanded the audience reach by up to 225 learners per topic.

Dynamic E-Learning Package

The accredited 60-minute activity will be delivered via an interactive and engaging online format. The Dynamic E-Learning Package will be delivered via Storyline 2, a powerful interactive E-Learning authoring software application that allows for various engagement opportunities for the learners. This tool can bring life to projects through images, animations, characters, review questions, quizzes, and games. Learners will access the activity on AAFP.org, which is optimized to expand learners' opportunities to access the education anytime, anywhere, and on any device.

The activity will also make use of video-based education that will depict physician-to-patient interactions, dialogue between experts, and expert presentations.

Learners will have a dynamic, engaging learning experience with options to include the following components:

- Split-screen video and slide presentation
- Physician-patient video vignettes
- Expert commentary from faculty
- Question-pause technology to engage learners
- Interactive games
- Links to other relevant resources
- Links to relevant AAFP patient education resources

Innovative tactics that will be used to facilitate learning and change:

- The interactive nature of this education will provide engaging, demonstrative, and participatory aspects throughout the activity.
- The activity will contain relevant links to additional resources, for additional information.
- The Translation to Practice™ (t2p) (see below; Outcomes) activity builds on learner commitments to change to encourage follow-through on intended actions. Learners identify and describe any barriers encountered in their attempts to implement change in the practice setting, and define plans for overcoming those barriers.

Online multimedia educational delivery mechanisms provide a means to engage learners who may otherwise not be able to attend a live CME activity. This educational format is especially applicable for learners from rural or smaller practices who do not readily have access to colleagues from other specialty areas or to other educational resources found in urban settings or larger multi-specialty institutions.

Online activities allow physician learners to engage with educational materials at a time and place that meets their learning needs. Opportunities to reflect on key concepts aid physician learners in transferring the new knowledge into practice.

All enduring content will be accessible online via www.aafp.org for two years.

Screenshots: Current Dynamic E-Learning activities

AAFP Overactive Bladder: Patient-Centric Management CLAIM YOUR CME

Drag and Drop: Sorting

Drag and drop each note to the correct bucket below (hint: the note changes color to help guide you to the correct bucket)

Note-1 Lower urinary tract disease	Note-2 Outlet obstruction	Note-3 Neurological disease	Note-4 Poor voiding habits	Note-5 Infection	Note-6 Restricted mobility
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 Precipitation causes	 Underlying Diseases/Causes	 Older Individuals
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Navigation: [Back] [Play/Pause] [Progress Bar] [Refresh] [SUBMIT]

AAFP Overactive Bladder: Patient-Centric Management CLAIM YOUR CME

Vignette - John



03:02 / 06:01

Navigation: [Back] [Play/Pause] [Progress Bar] [Refresh] [PREV] [NEXT] [Forward]

Patient Educational Formats & Learning Modalities

Clear patient education on Osteoporosis is crucial to build communication between the provider and patient. Familydoctor.org is the AAFP's patient facing educational website. It is a trusted source for medical answers used by physicians and patients reaching 3.5 million unique visitors a month. The website is unique, because it serves as a source of patient and caregiver education at the point of care in physician offices. Through familydoctor.org, patients and caregivers learn about self-care strategies and the importance of treatment adherence.



Calcium: What You Need to Know

FOOD AND NUTRITION NUTRIENTS AND NUTRITIONAL INFO PREVENTION AND WELLNESS

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Calcium is a mineral in your body that is also found in many foods. Most of the calcium in your body is in your bones and teeth. There is also calcium in your blood, muscles, other body tissues, and the fluid between your cells.

Path to improved health

You need calcium to keep your bones and teeth healthy and strong throughout your life. Your body also uses calcium to:

- Help blood vessels and muscles work properly.
- Help release hormones and enzymes that keep your body working properly.
- Help your nerves carry messages throughout your body.
- Help control important nutrients, such as magnesium, phosphorus, and potassium.

Your body can't make more calcium. So it's important for you to provide it with the calcium it needs. The amount of calcium you need each day depends on your age, your sex, and other factors. For example, [vitamin D](#) improves calcium absorption. Alcohol reduces calcium absorption. Doctors recommend:

- Children ages 0-6 months: 200 milligrams (mg) per day.
- Children ages 6-12 months: 260 mg per day.
- Children ages 1-3: 700 mg per day.
- Children ages 4-8: 1,000 mg per day.
- Children ages 9-18: 1,300 mg per day.
- Adults ages 19-50: 1,000 mg per day.
- Adult men ages 51-70: 1,000 mg per day.
- Adult women ages 51-70: 1,200 mg per day.
- Adults ages 71 and older: 1,200 mg per day.

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Weird New Focus Gadget Goes Viral.
Early adopters report being able to "focus in like a Laser Beam" stopping ADHD in its tracks.

FEATURED CONTENT

NUTRIENTS AND NUTRITIONAL INFO

[Probiotics](#)

NUTRIENTS AND NUTRITIONAL INFO

[Vitamins and Minerals: How to Get What You Need](#)

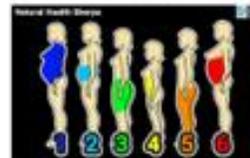
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[Trans Fats \(Bad Fats\)](#)

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[Dietary Supplements: What You Need to Know](#)

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Discover your Metabolic Type
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NUTRIENTS AND NUTRITIONAL INFO

[Hydration: Why It's So Important](#)

NUTRIENTS AND NUTRITIONAL INFO

[Vitamins and Minerals: How to Get What You Need](#)

NUTRIENTS AND NUTRITIONAL INFO

NBHA and the AAFP will co-develop a devoted familydoctor.org page to address the following gaps in patient knowledge related to Osteoporosis:

- Understanding the connection between fragility fractures and osteoporosis/low bone mass
- Learning what happens after a fracture has healed
- Learning how to prevent osteoporosis/fractures
- Understanding the risks and benefits of osteoporosis treatment

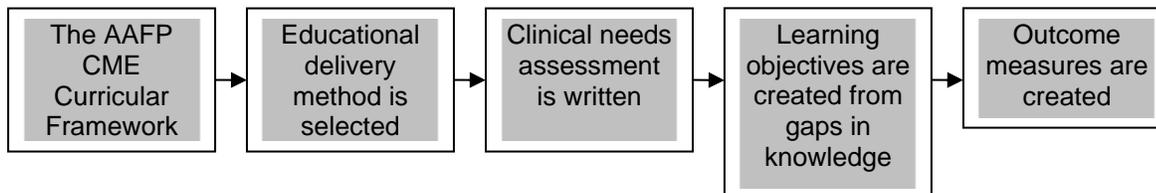
Formats for this patient education piece may include, but are not be limited to

- Assessment quizzes geared toward patient or caregivers
- Article(s)
- Handout(s)
- Infographics

AAFP Activities

The AAFP presents scientifically valid and commercially unbiased content based upon principles of effective adult learning in the following formats: live activities, self-study, enduring materials, journals, manuscript review for journals, point of care learning, various online formats, and Quality Improvement/Performance Improvement activities. The AAFP selects the most appropriate educational delivery method to best reach learners and achieve maximum educational impact. AAFP CME activities emphasize desirable physician attributes as identified by the Institute of Medicine, the American Board of Medical Specialties and the Accreditation Council for Graduate Medical Education. The AAFP will evaluate the effectiveness of all individual activities and of its overall CME/CPD program.

Clinical Needs Assessment Process



AAFP Educational Delivery Principles

The AAFP identifies and develops appropriate education modules through an extensive process of incorporating adult learning principles to create optimal learning opportunities to meet the objectives of the education as well as for its members. The AAFP CME Mission is to deliver education that closes the learning gap, enhances practice performance and improves patient care by delivering CME that is learner-focused, behavior-based and, most importantly, outcomes- driven.

In its role as an accredited CME provider, the AAFP is continuously enhancing its educational resources and services to offer needs-driven, learner-centric experiences that incorporate evidence-based clinical content, guidelines or performance measures with relevant recommendations for application to practice.

Outcome Measures

Outcome levels are derived from the conceptual framework developed by Donald Moore, Joseph Green and Harry Gallis for planning and assessing CME activities.

FMX Live Sessions

Outcomes for FMX sessions:

- Level 1 from CME Records data,
- Level 2 from completing the evaluation,
- Level 4 through the use of case-based decision-making pre- and post-test questions
- Level 4 if the participant chooses to complete the completion of the commitment-to-change questions that are offered on the evaluation.

Dynamic E-Learning Package

A comprehensive pre-test will be required before entering the case portal and then again at the close of the activity, to receive CME credit. Case-specific questions will be inserted into each of the video vignettes and other presentation materials. The online activity will provide outcome measurement, as described above, with the addition of Level 5 data from Translation to Practice (t2p).

Translation to Practice (t2p)

Translation to Practice® (t2p) is an AAFP CME activity supplement, designed to encourage learners to implement new knowledge and skills into practice (Moore's level 5 performance outcome).

Physician learners are provided with online practice enhancement through a "Translation to Practice" (t2p) activity which is aimed at moving learners from competence to performance. Learners are encouraged to reflect upon the concepts they learn in the CME activity and translate that knowledge into practice changes that will have a positive impact on patient care. Translating learning to practice is a self-directed, reflective-practice that involves a self-assessment of individual practice performance and the evaluation of their current practices, application of new knowledge/skills, and reflection on barriers to change. Translation to Practice® provides physician-learners a three-step process that allows them to implement new practices or processes learned in their CME experience into their practice.

Step 1: Commitment to Change Statement

Step 1 requires that learners fill out a Commitment to Change Statement in which they summarize what they learned in the CME activity, identify the change(s) they plan to integrate into their practices, describe their motivation for implementing the change, and state what they believe will be improved. Learners are also asked to identify whether this change will impact their knowledge, competence, performance or care of patients.

Step 2: Implementing Change

The second step takes the physician learner back to their practice where they implement the change they identified in Step 1.

Step 3: Reflection Summary

At 30 days and again at 90 days, the third step of Translation to Practice provides an automated email to the physician-learner asking him/her to fill out an "AAFP Translation to Practice Reflection Summary", where learners will describe:

- changes made as a result of the CME activity;
- impact of the change on the practice;
- where information to implement the change was obtained;
- barriers encountered and what was done to overcome them;
- changes in thoughts and attitudes;
- personal application of the learning into the practice;
- plans to ensure practice changes are maintained; and
- how changes have impacted knowledge, competence, performance or care of patients.

How the educational format(s) are appropriate for the setting, objectives, and desired outcomes of the activity

The CME activity will directly facilitate change through a structured presentation of educational material. Changes in learners’ knowledge, competence, and performance will be assessed.

Target Learners

The primary target audience for the education is family physicians. The primary care provider is the gatekeeper for patient care, from disease prevention, recognition, treatment, follow up, care coordination, and referral as necessary.

Relevance to the Primary Learner Audience for the CME Webcast

Family physicians care for patients of all ages, and often over many years. Therefore, it is essential that family physicians remain current on all aspects of disease management and actively seek to contribute to improving public health outcomes through improved adherence.

Relevance to the Secondary Learner Audience

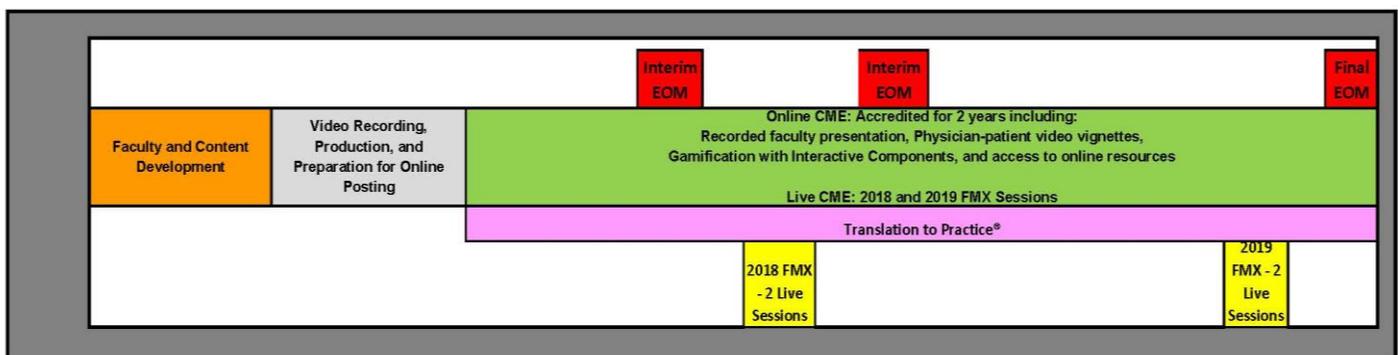
Advance care providers such as nurse practitioners, physician assistants and registered nurses, along with other office staff, have multiple interactions and opportunities to educate a patient during an office visit. Their success to support a physician’s recommendation relies on their knowledge of osteoporosis, individual perceptions, and the ability to reinforce the physician’s messaging regarding the importance of adherence to the care plan.

Activity Time Line and Duration

FMX session will take place in the fall of both 2018 and 2019. The online CME activity will be approximately one-hour in length and will be available online for two years. Each of the video vignettes within the online activity will be approximately ten minutes in length. These videos will also be available online for two years.

Timeline

CME Program on Bridging the Osteoporosis Screening, Diagnosis, Treatment Gap in Primary Care - Timeline Model



2017					2018												2019												2020
Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct-Dec	Jan-Mar		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28-32		

Audience Generation

Audience generation will take place through a variety of tactics. All enduring content will be accessible online via www.nbha.org and www.aafp.org for the duration of two years. Additional marketing will be distributed through:

Physician Education:

- Blast emails and other digital efforts such as e-newsletters and SmartBriefs
- Postcards and other print efforts such as direct mail and CME Portfolio Brochures
- Hyperlink on CME's webcast page
- Promotion and hyperlinks on NBHA's Fracture Prevention Central website and YouTube Channel
- Outreach to NBHA's 55 member organizations with a reach of over 100,000 healthcare professionals and 10 million consumers
- Hyperlinks on Fracture Prevention Central's webinar page

Patient Education:

- Familydoctor.org home page feature topic placement 3 months out of each year
- Develop special ads specific to this content that will be shared through our social media channels targeting the public at large.
- Develop ads for AAFP journals and Smartbrief promoting Familydoctor.org content
- Promotion and hyperlinks on NBHA's Fracture Prevention Central website and YouTube Channel
- Outreach to NBHA's 55 member organizations with a reach of over 100,000 healthcare professionals and 10 million consumers
- Hyperlinks on Fracture Prevention Central's webinar page

AAFP Member Marketing strategy

As this topic is applicable to a broad cross-section AAFP members, marketing activities will focus on those channels that will reach larger segments of membership. Following are examples of potential channels:

Chapters – A marketing extension of the organization, the chapters inform members of resources and events through their state efforts and channels. Through 55 chapters, a reach of 124,900 (all members) could be obtained.

eNewsletters:

- *Products & Services* alerts approximately 60,000 AAFP members to new resources available from the AAFP
- *Family Medicine SmartBrief* is a curation of articles from thousands of sources providing 62,000 family physicians and health care professionals the most relevant news in family medicine.

Journal Ads – AAFP's peer-reviewed journals providing concise information family physicians need on topics they encounter daily.

- *AFP* is the best read journal in primary care by nearly every conceivable measurement
- *FPM* readers rely on information immediately useful in delivering high-quality, cost-effective patient care

Social Media – Current AAFP reach is 63,400 Facebook followers and 12,700 Twitter followers

NBHA Marketing strategy

NBHA Membership - NBHA will promote the program and activities to our 55 member organizations with a reach of over 100,000 healthcare professionals and 10 million consumers

eNewsletters:

- NBHA News reaches around 55,000 healthcare professionals interested in Osteoporosis and post-fracture care
- Fracture Prevention Central Newsletter reached 6,500 subscribers all with an interest in education and resources around Osteoporosis and post fracture care.

Exhibits and Meetings – NBHA will promote activities and resources at our booths at medical meetings and sessions where we are talking about resources that are available.

Social Media – NBHA will use its Facebook, Twitter and LinkedIn to highlight and promote the program and all of its related events and resources.

Consumer Marketing

FamilyDoctor.org is a website providing actionable patient information. As such, marketing efforts for this project will also explore consumer-facing opportunities that introduce the new content to target audiences where they are, with an emphasis on digital placement. Following are examples of potential activity:

Social Media – Posts and paid ads targeted for audiences within the FamilyDoctor.org demographic as well as those identified as interested in bone health.

SEO and keyword purchase – to elevate search associated with bone health and related terms. This is essential for organic search and will significantly impact traffic for new content.

Digital Ads – Exploring where FamilyDoctor.org followers and fans spend their time (publications, blogs, websites, etc.) and targeting digital ads that surface FamilyDoctor.org content where they already spend their time.

AAFP will work with a family physician and our medical review board consisting of both patients and physicians, to review the content of the piece to ensure it adheres to the evidence based policies and the health literacy level is appropriate for the patient audience.

Marketing & Promotion strategy

- Familydoctor.org home page feature topic placement 3 months out of each year
- Develop special ads specific to this content that will be shared through our social media channels targeting the public at large.
- Develop ads for AAFP journals and Smartbrief promoting Familydoctor.org content

NBHA's Fracture Prevention Central website has many resources for patients. All links to the Family.org highlighting the program and resources will be added. NBHA will highlight links/resources on its homepage 3 times a year as well as on the Fracture Prevention Central Website. We will also use NBHA's social media channels to promote and highlight the content and resources.

Faculty Expectations

The AAFP has maintained a strong commitment to osteoporosis, and has a deep pool of family physicians who have been involved with and in support of the myriad of activities, from which to draw and engage for the development and presentation of this activity.

Faculty play a vital role in assisting the AAFP to achieve its mission by providing high-quality, innovative education for physicians that will encompass the art, science, evidence and socio-economics of family medicine and 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. The AAFP asks that faculty:

- 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
- Design education to facilitate engagement and learning
- 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 References section below are a good place to start
- Visit <http://www.aafp.org/journals> for additional resources
- Visit <http://familydoctor.org> for patient education and resources
- Provide case-based examples to demonstrate the strategies to meet the educational objectives.
- Provide specific strategies and resources to counsel patients
- Provide specific examples of free and commercially available patient education resources.

Budget Summary

Management Fees	
Program Development	\$ 41,820
Editorial/Literature Review	\$ 614
On Site Management	\$ 662
Other: AAFP Educational Design Services, NBHA/NOF Services	\$ 47,317
Total Management Fees	\$ 90,413
Direct Program Expenses	
Logistics	
Meeting Room	\$ 937
Other Meeting Room Fees (FMX construction, Internet; shuttle services, security, supplies, accounting)	\$ 4,559
Audio Visuals & Equipment	\$ 2,541
Audience Response System	\$ 1,793
Online Hosting/Maintenance	\$ 53,778
Audience Generation	
Mailing Lists	\$ 1,775
Printing, Postage, Shipping	\$ 101,036
Other - AAFP marketing costs, NBHA marketing costs	\$ 64,812
Program Materials	
Meeting Handouts	\$ 461
Other - webinar production costs	\$ 20,384
Accreditation and Outcomes Evaluation Fees	
Accrediting Fees	\$ 3,177
Staff Transportation and Lodging	
Air Travel	\$ 2,151
Ground Transportation	\$ 200
Lodging	\$ 541
Speaker Transportation and Lodging	
Air Travel	\$ 2,151
Lodging	\$ 1,083
Fee for Service	
Program Chair	\$ 3,944
Total Direct Program Expenses	\$ 265,324
TOTAL PROGRAM BUDGET	\$ 355,737

AAFP Mission

The mission of the American Academy of Family Physicians (AAFP) is to improve the health of patients, families and communities by serving the needs of members with professionalism and creativity. One method for achieving this mission is to provide 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. Since 1947 the AAFP has provided family physicians and other health care professionals learning opportunities that improve their competence, support their preparedness for certification/licensure and increases the vitality and efficiency of their practice. The AAFP delivers relevant, evidence-based education aimed at increasing knowledge and competence, improving the performance of the physician and care team and ultimately positively impacting patient care and community health.

Family Medicine

AAFP defines family medicine as a three-dimensional specialty incorporating knowledge, skill and process in the comprehensive and continuing care of individuals and families. The scope of family medicine encompasses all ages, sexes, each organ system and every disease entity. According to the AAFP, “the family physician functions as the patient’s means of entry into the health care system and, as the physician of first contact in most situations, is in a unique position to form a bond with the patient. The family physician’s care is both personal and comprehensive and not limited by age, sex, organ system or type of problem, be it biological, behavioral or social.”

Of the primary care specialties (family medicine, general internal medicine and pediatrics), family physicians provide care to the largest percentage of the population. Additionally, family physicians’ practices are more evenly distributed throughout the country than any other specialty practice in rural or underserved areas. Although some patients require referral to sub-specialists for enhanced methods of evaluation or treatment, the family physician ultimately remains the coordinator of the patient’s health care. Such continuity prevents fragmentation and assists patients with clinical care and information, as well as understanding and navigating the health care system.

The education of family physicians therefore must include a broad range of topics to prepare them for the variety of patients and conditions they may see in practice. However, many family physicians choose to receive additional training in specific clinical areas as determined by their practice setting, needs of the patient population and professional development. As a result CME offered to family physicians should be respectful of the broad scope of family medicine as a specialty as well as specific content needs identified by the physician for enhanced education and life-long learning.

Consider the following from the AAFP Scope and Philosophical Statement: “Although all family physicians share a core of information, the dimensions of knowledge and skill vary with the individual family physician. Patient needs differ in various geographic areas, and the content of the family physician’s practice varies accordingly. For example, the knowledge and skills useful to a family physician practicing in an urban setting may vary from those needed by a family physician with a rural practice. Furthermore, the scope of an individual family physician’s practice changes over time, evolving as competency in current skills is maintained and new knowledge and skill are obtained through continuing medical education.” [American Academy of Family Physicians (AAFP). Family Medicine - Scope and Philosophical Statement. 2011; <http://www.aafp.org/about/policies/all/fm-scope.html>. Accessed January, 2014]

CME Credit

The AAFP, as one of the three national CME credit systems, certifies CME activities for AAFP Prescribed and Elective credit on a per-activity basis. In addition, the AAFP is an ACCME accredited provider with Commendation. The process for review and approval of CME activities for AAFP CME credit comes under the purview of the AAFP Commission on Continuing Professional Development

(COCPD) and is administered by the AAFP CME Credit Systems and Compliance department. Approval of CME activities is based on established criteria and policies.

NBHA Mission

Established in late 2010, the National Bone Health Alliance is a public-private partnership that brings together the expertise and resources of various partners across a broad spectrum to promote bone health and prevent disease; improve diagnosis and treatment of bone disease; and enhance bone research, surveillance and evaluation. NBHA is a platform that allows all voices in the bone health community to work together around shared priorities and develop projects that can become reality through pooled funding. The 51 members of the Alliance (in addition to liaisons representing the Centers for Disease Control and Prevention, National Aeronautics and Space Administration, National Institutes of Health and U.S. Food and Drug Administration) are working from a shared vision: to improve the overall health and quality of life of all Americans by enhancing their bone health. For more information on NBHA, visit www.nbha.org.

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