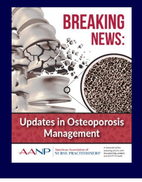


BREAKING NEWS: UPDATES IN OSTEOPOROSIS MANAGEMENT

AANP
American Association of NURSE PRACTITIONERS®

Introduction & Gaps

Introduction: In the United States, 10 million people have osteoporosis, and each year, there will be 2 million fractures, 432,000 hospital admissions, and 180,000 nursing home admissions due to the disease. In a retrospective review of Medicare data, including 126,188 women 66 years of age and older, only 27.9% of women diagnosed with osteoporosis began treatment within a year of diagnosis. This educational activity focused on education to ensure NPs have the tools to increase screening and implement appropriate treatments to reduce fractures and improve patient outcomes.

Knowledge Gaps

- Review the evidence that supports screening for at-risk individuals
- Determine factors that identify patients as at-risk for fragility fracture
- Integrate strategies for testing at-risk patients
- Integrate lifestyle modifications and physical activity in a comprehensive osteoporosis treatment strategy
- Prioritize treatment options for patients who are at-risk for fragility fractures

Program Information & Methods

Programs: Training occurred through two formats, an accredited monograph and an on-demand slide presentation. Both were accredited for 1.75 contact hours of CE, including 0.25 pharmacology credits. One unaccredited podcast was produced and hosted on AANP's platform - NP Pulse: *The Voice of the Nurse Practitioner®.*

Data Collected: Changes in knowledge, competence, self-reported changes in confidence and practice habits, and identification of remaining gaps.

Measurements and analysis: Questions were asked before and immediately after the activity. A 60-day follow-up survey was sent to participants who completed the activity to identify any practice changes made.

- A paired analysis of pre/post results was conducted. These data were filtered to include only learners who self-reported seeing patients weekly (n=7,974). N=166 for the follow-up survey, of which 139 self-report seeing a combined total of 1,092 patients who were positively impacted by the education or materials included.
- Demographics (pre), evaluation (post), and follow-up survey results shown here use descriptive statistics
- Tests used to identify statistically significant differences pre to post:
  - McNemar test for each of 8 multiple choice knowledge/case questions
  - Wilcoxon test for % correct knowledge/case questions, and the confidence rating scale questions
- $P \leq 0.05$ indicates a statistically significant difference
- Effect Size (ES), to indicate the size of the change, was also calculated as appropriate (Cohen's *d*): 0.20 = small, 0.50 = medium, 0.80 = large.

Executive Summary

Knowledge/competence increased significantly:

Overall 33% relative increase in correct answers to 8 knowledge/case questions from pre (46%) to post (61%) with a medium to large effect size (Cohen's d = 0.70).

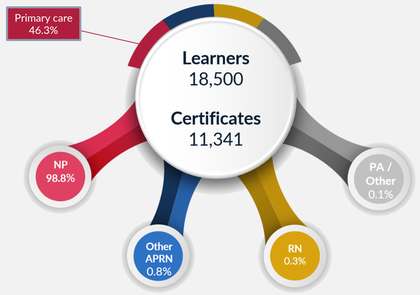
Current (pre) to planned (post) frequency of use of 2 optimal patient care strategies increased significantly:

There was a 74% relative increase in learners selecting "Always review this with vitals" for "evaluate for height changes during adult annual physical exams."

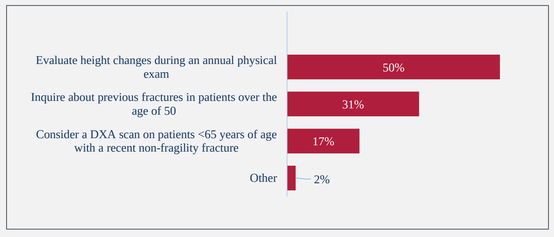
There was a 2.6-fold increase in learners selecting "Every visit" to "inquire about previous fractures in patients over 50."

This activity is supported by an independent educational grant from Amgen

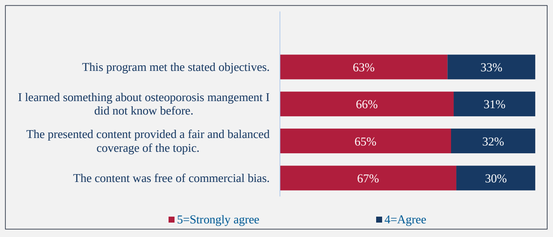
Learner Demographics and Engagement



Evaluation: Planned Change (n=7,974)



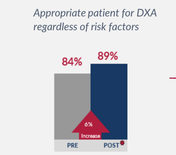
Evaluation: Level of Agreement (n=7,974)

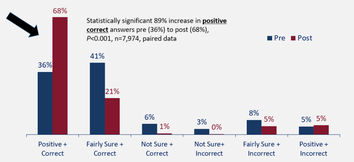


Results

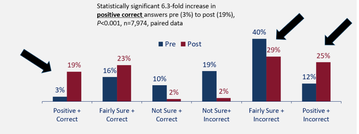
Changes in Knowledge n=7,974 paired data, *P<0.001

Appropriate patient for DXA regardless of risk factors

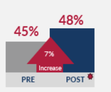




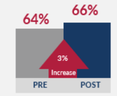
Knowledge of appropriate plan to evaluate fracture risk (case study)



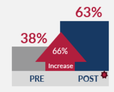
Knowledge of the common risk factors for osteoporotic fracture



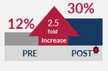
Knowledge of calcium recommendations for females aged 51 or older (P=0.002)



Knowledge of osteoporosis treatment plan (case study)



Knowledge of first-line treatment (case study)

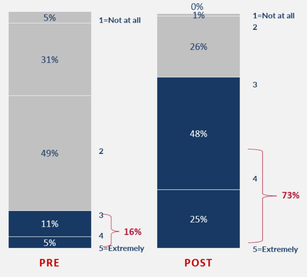


Knowledge of agent for long-term osteoporotic fracture prevention

Knowledge of secondary cause of osteoporosis

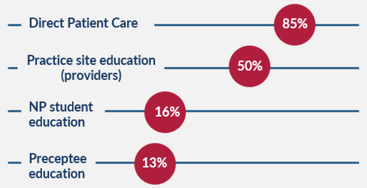
Change in Confidence

How would you rate your level of confidence in:
Identifying a PRE-menopausal patient at risk for osteoporosis?



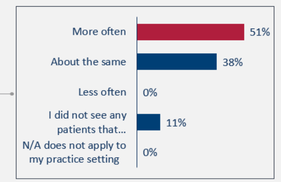
60-Day Follow-up (n=139)

Over the past 60 days, have you used the information from this activity for any of the following? (n=137)

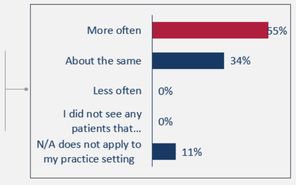


Practice Changes

As a result of this activity, I have measured and evaluated height in my patients (n=139)



As a result of this activity, I have inquired my adult patients about their history of previous fractures (n=139)



Over the past 60 days have you implemented any of the following? (Select all that apply)