An Educational Intervention To Promote Bone Health In High-Risk Patients

The Problem

Evidence suggests that patients at risk for osteoporosis often do not receive appropriate screening. Older adults with COPD or asthma prescribed prolonged therapy with oral or high-dose inhaled steroids are at high risk of osteoporosis.

Aim/Goal

1) To design and implement an educational intervention focused on osteoporosis screening and management in older high-risk patients

2) To assess the effectiveness of this intervention in creating change in physician behavior

The Team

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The Interventions

Baseline compliance with osteoporosis management guidelines in older patients with COPD or asthma at the BIDMC outpatient pulmonary practice was assessed. A needs assessment/attitude survey was administered to the participants, which guided the development of an educational intervention. Change in physician behavior was assessed by auditing the records of high risk patients seen by learners after participation in the educational intervention for six months. Knowledge transfer and changes in attitude were also assessed.

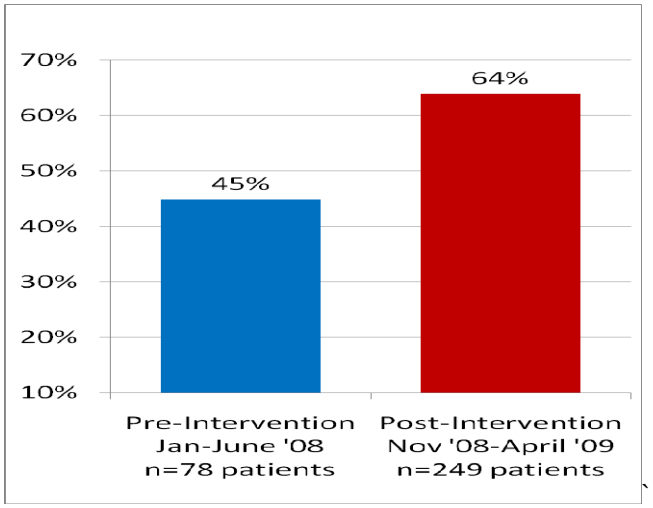
The participants were nineteen pulmonologists (9 attendings, 9 fellows, and one pulmonary nurse practitioner).

The interventions included were 1.) a case-based virtual patient (VP) module, 2.) a focused didactic session led by an expert endocrinologist, and 3.) posters in the clinic rooms, and 4.) individual report cards.

The Results

We observed a 19% increase in overall rate of bone health assessment in high-risk patients: 45% pre-intervention to 64% post-intervention, n=249 patients, p=.003. Surveys and test scores also showed statistically significant gains.

Rates of bone health assessment over time:



P=0.003

Lessons Learned

An educational intervention can impact physician behavior and improve osteoporosis management, in addition to increasing confidence and knowledge.

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