

Improving Osteoporosis Screening in Men >50 with Risk Factors

Nathan Mauck MD, Connor Levy MD, Ryan Wanstreet MD, Amanda Rahman MD, Joseph Capito MD, Robert Allison MD, Michael Maroon MD, Amy Brenwalt MD, Melody Phillips MD, Erona Reza MD, Allen Rickards MD, Amie Ashcraft PhD, Kelsey Samek RN, Kendra Unger MD, Savannah Lusk MD, and Shaylee Peckens MD

Department of Family Medicine, West Virginia University, Morgantown, WV

BACKGROUND

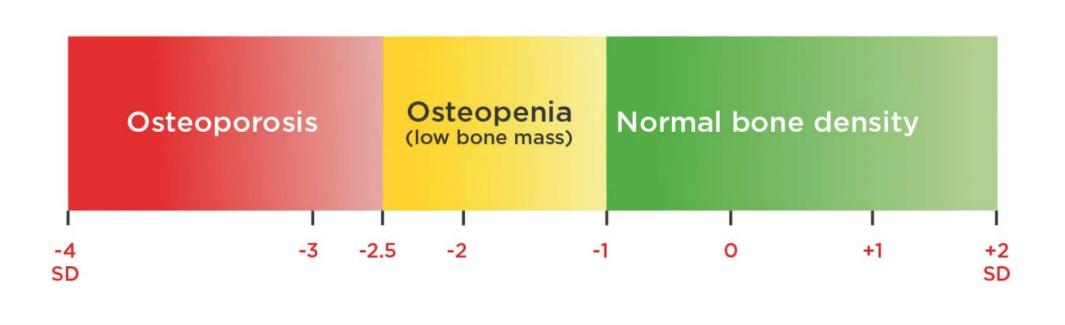
- USPSTF: evidence inconclusive for osteoporosis screening in men
- Endocrine Society: all men >70 years and men >50 years with risk factors should be screened via DEXA scan
- Due to lack of universal support for screening in men, many go without screening which may lead to higher rates of major osteoporotic fracture

OBJECTIVE

Increase proportion men aged 50 years or older with risk factors being screened for osteoporosis

METHODS

- EMR used to determine proportion of eligible men that have had screening
- Risk factors: androgen deprivation therapy, hypogonadism, frailty, primary hyperparathyroidism
- Osteoporosis screening (DEXA) included in Medicare Annual Well Visit workflow
- Reminder implemented in EPIC HCM tab
- Provider education on Endocrine Society recommendations via email
- Intervention: 3/27/2024— 7/31/2024



RESULTS



- 254 out of 422 eligible males have been screened after intervention
- 84 new males screened since start of intervention
- Screening rates were increased by 48.6% in our target population

Secondary outcomes

- Of men screened, 47% had osteopenia and 19% had osteoporosis
- Only 9.42% of this population currently on therapy
- Risk factors: hypogonadism (33%), hyperparathyroidism (10%), androgen deprivation therapy (4%), frailty (2%)

Discussion

- Osteoporosis screening increased from 11.6% to 60.2% after intervention, greatly exceeding our goal of 20%
- Limitations: rate of increase affected by baseline rate which may very between clinics, interventions may be limited with other EMR systems

Future Directions

Phase 1: Pilot Evaluation (3-6 months)

- Analyze pilot results, identify barriers, and refine intervention
- Identify secondary outcomes including osteoporosis diagnoses, medications started, fracture rates

Phase 2: Implementation in Additional Sites (6-12 months)

- Expand screening to other WVU Family Medicine sites
- Implement EHR-based CDS tools and provider training

Phase 3: Regional and National Expansion (12-24 months)

- Share results at conferences and through partnerships
- Collaborate with professional societies for broader adoption

Sustainability Plan

Institutional Support

- Integrate screening as a permanent part of clinical workflows
- Provide ongoing provider training and CME modules

Continuous Monitoring

 Establish long-term EHR data tracking and quarterly performance reviews

Patient Engagement

- Use digital health tools to educate patients and raise awareness
- Collaborate with community partners for outreach

References

- Guidelines based on the Endocrine Society 2012
- Images: hospitalCMG.com, OSGPC.com
- No conflicts of Interest
- Presenter: Ryan Wanstreet, MD
 - PGY-2 Family Medicine Resident of WVU School of Medicine
 - Email: ryan.wanstreet@hsc.wvu.edu



