Challenges in the Treatment of Osteoporosis

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A Few of the Many Challenges

• Osteoporosis treatment gap
• Access to care
• Fear of drugs
• Uncertainties and controversies
• Understanding and communicating benefits and risks without treatment and with treatment
• Effective use of available therapeutic agents
• Educating healthcare providers with many competing healthcare priorities

A Brief History of Osteoporosis

How did we get where we are today?

E. Michael Lewiecki, MD
Personal Opinion

Osteoporosis Care

1. Treatment Gap
2. Crisis
3. Call to Action
The Surgeon General’s Call for National Action

Encourages individuals and communities to join together to promote bone health by:

- Increasing awareness
- Promoting lifestyle changes
- Defining and implementing prevention and treatment options for people of all ages

2004

2008

Opinion Paper
Osteoporosis care at risk in the United States
E. M. Lewiecki, N. Babin, E. N. Vale

2009

Viewpoint
A Professional Opinion Article
Crisis in Osteoporosis Care
E. Michael Lewiecki, MD, FACP, FACE
Lewiecki EM. The Female Patient. 2009; 34(1);17-18.

2014

Osteoporosis treatment in India: Call for action

2016

Editorial
A Crisis in the Treatment of Osteoporosis

Not enough DIXAs. Mostly in urban areas.

Treatment After Hip Fracture

Review of US insurance claims data commercial in 56,887 patients hospitalized with hip fracture, 2002-2011

2016

HEDIS Report Card

HEDIS Measure
The percentage of women age ≥67 years with a fracture who had either a BMD test or prescription for a drug to treat or prevent osteoporosis in the 6 months after the fracture.
Low Treatment Rates After Fractures in Canada


Treatment Gap in EU Countries


Reduced Bisphosphonate Prescription Rates Starting in 2008


Access to Care

DXA Reimbursement

The Lewin Group Final Report
October 31, 2007

- Survey of 163 DXA providers
- Median cost per DXA = $134
- Reimbursement of $82 is 61% of median cost
- Projected consequences, 2008-2012
  - Closure of many DXA facilities
  - Fewer patients diagnosed, fewer treated, more fractures
  - Medicare saves $643 million due to 4.3 million fewer DXAs
  - Medicare spends extra $2.1 billion for fracture-related expenses
- Considering costs of treatment, net cost to Medicare by reducing DXA reimbursement is $1.1 billion

The Lewin Group; DobsonDaVanzo, LLC. Assessing the Costs of Performing DXA Services in the Office-Based Setting: Final Report. 2007.
Loss of about 1000 DXA Office Providers per Year since 2008

Decline in DXA Reimbursement

Decline in DXA Testing

Decline in Osteoporosis Diagnosis


Fear of Drugs
Fear of Drugs

2003
ONJ
2005
AFF

Severely Suppressed Bone Turnover: A Potential Complication of Alendronate Therapy


Jaw Rot
Brittle Bones
Femur Snaps

Jaw Rot
Brittle Bones
Femur Snaps

Osteoporosis Drug

Atrial Fib
Muscles Ache
Back Pain
Fatal Stroke
Blood Clots

Osteoporosis Wheel of Fear
Uncertainties and Controversies

Controversies / Uncertainties

Evaluation
- DXA
  - Indications
  - Testing intervals
  - Quality
  - Reimbursement
- Fracture risk assessment
  - Wise use of FRAX
  - Other algorithms
- Secondary causes
  - Best w/u for a patient

Treatment
- Non-pharmacological
  - Best exercise
  - Calcium and CV disease
  - Target vitamin D level
- Pharmacological
  - Initial drug selection
  - How long to treat
  - Changing therapy
  - Combining therapy
  - Benefit vs. risk

Overcoming the Challenges


- Short term
  - Better messaging to physicians and patients
  - Monitor for AFFs (DXA long femur view, etc)
- Intermediate term
  - Identify patients at high risk for AFF
- Long-term
  - Pharmacogenomics, drug development, guideline coordination, patient engagement


- New ways to guide patient decisions
  - Better physician and patient education
  - Better adherence to therapy
- New drug development
  - Include complementary and alternative options
  - Herbal medications
- New osteoporosis research
  - Better funding

Alignment of Incentives

- Healthcare systems (Kaiser, Geisinger, other countries) have shown improvement outcomes and cost savings by identifying and treating high risk patients to prevent fractures
- Most healthcare in the US is delivered in “profit centers”
- A change in healthcare delivery with alignment of incentives of all stakeholders is needed
Restore DXA Reimbursement to Sustainable Levels

- Reimbursement below the cost of providing the procedure is causing DXA facilities to close and limiting access to needed services
- Adequate reimbursement will provide access to care for more patients, allowing identification and treatment of those at high risk

Low DXA Reimbursement Leads to Poor DXA Quality

- Losing money with DXA
- No investment in education and training
- Suboptimal DXA studies
- Inappropriate clinical decisions

Potential harm to patients and higher medical expenses: unnecessary lab tests, wrong treatment, fractures that might have been prevented

DXA Quality

How to use DXA Best Practices if you are a bone densitometrist

- Download DXA Best Practices
- Be familiar with it
- Follow the recommendations
- Be trained and stay updated
- Get certified (if not already)
- Facility accreditation is the best way to demonstrate that high quality DXA is being performed

How to use DXA Best Practices if you are NOT a bone densitometrist

- Ask the DXA facility about the following
  - Certification for DXA tech and interpreter
  - Facility accreditation
  - Precision assessment has been done and least significant change is known
- Look at the report
  - Make and model of DXA instrument are identified
  - One diagnosis per patient, not different diagnosis for each skeletal site
  - One fracture risk assessment per patient, not different one for each skeletal site

Better Risk Communication and Patient Education

- Risk of fractures when untreated compared to treated
- Consequences of fractures (especially loss of independence)
- Balance of benefits and risks with treatment
- Individualized risk probability
- Shared decision making

Open access: download FREE at www.iscd.org

10-Year Probabilities

More Effective Use of Available Treatments

- Use best drug for the right patient
- Know when to start, stop, change, and combine treatments
- Fall prevention
- Follow-up after starting treatment

Treat-to-Target

Fracture Liaison Service (FLS)

- National Bone Health Alliance (NBHA)
  - Fracture Prevention Central
  - www.nbha.org/fpc
- American Orthopaedic Association (AOA)
  - Own the Bone
  - www.ownthebone.org
- International Osteoporosis Foundation (IOF)
  - Capture the Fracture
  - www.iofbonehealth.org/capture-fracture

Novel Strategies to Educate Healthcare Professionals

- Current paradigm of educating PCPs is not fully effective
- Not enough specialists
- Alternative strategy
  - Move knowledge not patients
  - Raise the level of knowledge of a few motivated PCPs in underserved communities
  - Offers advanced level of care for all patients in the community

Project ECHO®

Bone Health
Bone Health TeleECHO Launch, October 6, 2015

USA Participants: 15 Months

Self-Efficacy Outcomes Measures

*Bone Health ECHO learners with direct patient care responsibilities who attended more than 10 clinics (n=10)
Summary

• Many challenges in osteoporosis care
• Consequences of poor care are great
• International problem
• Many causes
• We can do better