



BONE DENSITY & OSTEOPOROSIS:

An Update for Manitoba Physicians

No. 7: January 1, 2006

Bone Density Testing – Making a Clean Break!

What changed?

On January 1st 2006 the Manitoba Bone Density Program introduced major changes in the reporting of a BMD test. This should help you to:

- quickly understand the BMD results & their implications,
- easily transmit these results to your patient, and to
- more confidently manage your patient.

What will the new BMD report contain?

The numerical information is provided in the same way as in previous BMD reports. The T-score will continue to be reported for anyone age 50 or older, but is now categorized as non-osteoporotic or osteoporotic. The T-score captures only one aspect of fracture risk. After age 50 we are now providing an **estimated absolute fracture risk** (percent chance of your patient having an osteoporotic fracture over the next ten years) based upon BMD, age and clinical risk factors (provided by the patient at the time of testing). For comparison, we include the average fracture risk for a person of the same age and gender. (Note that fracture risk is not estimated prior to age 50.)

“**Fracture risk**” over the next 10 years is categorized using definitions similar to risk categories for cardiovascular disease:

- Low risk: <10% chance of an osteoporotic fracture,
- Medium risk: 10-20% chance of an osteoporotic fracture, or
- High risk: > 20% chance of an osteoporotic fracture.

Key points when reviewing a BMD test

- a) Not all risk factors for fracture are amenable to pharmacotherapy. In a non-osteoporotic individual with high risk of fracture due to falling, a falls prevention program may be preferred to pharmacotherapy. Pharmacotherapy has been most clearly shown to benefit patients with BMD in the osteoporotic range or those with established fragility fractures (especially when they affect the spine).
- b) T-scores should not be used as a ‘stand-alone’ result guiding your management recommendation. Many factors affect fracture risk other than BMD (older age and previous fragility fractures are the most important). Patients can still be at high risk of fracturing with bones in the osteopenic or normal range (now grouped together as “non-osteoporotic”). Alternately, patients can have a relatively low risk of fracturing even with bones measured in the osteoporotic range (especially if they are relatively young and do not have other risk factors).