

### Prescribing of Testosterone Replacement Therapy Continues to Increase Among Older Men in Ontario Despite Safety Concerns

The use of testosterone replacement therapy (TRT) among elderly men in Ontario has more than tripled over the past 15 years despite potential safety concerns of these products among elderly men with multiple comorbidities and government-imposed prescribing restrictions

#### What does this mean?

- In 2006, coverage of TRT was restricted to the treatment of hypogonadism. Results suggest that TRT is frequently being prescribed to patients outside of this indication.
- Despite some evidence suggesting potential cardiovascular safety concerns with TRT in the elderly, a large proportion of elderly men receiving TRT had cardiovascular disease.

#### Clinical Implications

- ✓ Better appreciation of the approved clinical indications for public drug coverage of TRT is needed.
- ✓ Physicians should consider the cardiovascular risk factors of patients prior to prescribing TRT, particularly among the elderly

#### How do we know this?

The ODPRN conducted a time series analysis using linked health administrative records among men aged 66 years of age and older who received testosterone products reimbursed by the provincial drug plan in Ontario, Canada between January 1997 and March 2012. A total of 28,477 men were dispensed testosterone over the study period. Overall, testosterone prescribing increased more than 3-fold between 1997 (3.6 men per 1000 eligible) and 2012 (11.0 men per 1000 eligible). Although testosterone prescribing declined 27.9% early 2006 following their change in listing from General Benefit to Limited Use ( $p < 0.01$ ), the overall decrease was temporary and testosterone use exceeded pre-policy levels by the end of the study period (11.0 men per 1000 eligible). This was largely driven by prescriptions for topical testosterone, which rose 464% between the policy change in 2006 (1.0 men per 1000 eligible) and the end of the study period (4.8 men per 1000 eligible). Only 6.3% of men who initiated TRT had a previous diagnosis for hypogonadism.

*This Research Minute was created by the ODPRN.*

Piszczek J, Mamadani M, Antoniou T, Jaurink DN, Gomes T. The impact of the drug reimbursement policy on rates of testosterone replacement therapy among older men. *PLoS ONE*. 2013;8(12):e81211. doi:10.1371/journal.pone.0081211

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