



## Health Newsflash

### Use of Erectile Dysfunction (ED) Drugs in an Increasingly Younger Male Population

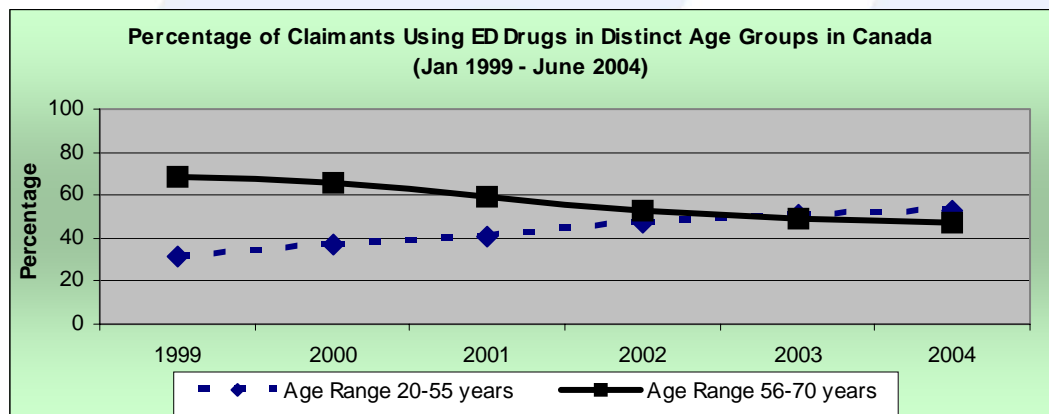


Erectile dysfunction, or ED, is a disease that affects men of all ages but its prevalence increases dramatically with age and presence of existing medical conditions, such as diabetes, heart disease, high blood pressure, depression, and prostate surgery.<sup>1,2</sup> It is estimated that 2 to 3 million Canadian men currently suffer from erectile difficulties.<sup>2,3</sup> Despite the increasing awareness of ED among the male population, up to 70% of men remain untreated.<sup>4</sup> Currently, there are a variety of non-drug and drug treatment options for ED that include vacuum constriction devices, prosthetics, local penile injections and inserts (Caverject, MUSE), and oral tablets. In Canada, there are 3 oral drugs approved for the treatment of ED: Viagra (sildenafil), Cialis (tadalafil), and Levitra (vardenafil). Viagra, the first oral ED drug, was launched in Canada in March 1999. With Viagra's introduction, and the subsequent availability of Cialis in 2003 and Levitra in 2004, ED patients now have access to effective, non-invasive treatment options.

#### Optimizing the Value of Drug and Dental Benefits

A recent study by Express Scripts Inc. of St. Louis, U.S. (ESI Canada's parent company) evaluated the use of Viagra for privately insured adults from 1998-2002.<sup>5</sup> The researchers examined a random sample of approximately 1 million lives for each year of the study. It was found that the percentage of people using Viagra had increased from 0.8% in 1998 to 1.4% in 2002 (75% increase).<sup>5</sup> In addition, it was discovered that the use of Viagra had decreased among males older than 65 years and increased in males younger than 65 years during the study period. In fact, the greatest increase in number of users was found to be in males aged 18 to 45 years.<sup>5</sup>

To investigate whether this trend in ED drug use occurred in Canada, similar retrospective claims analyses of the ED drugs (Viagra and Cialis) were undertaken by ESI Canada. (Note: Levitra was introduced in March 2004 and therefore is not included in the study). The study analyzed claims by age group from January 1999 to June 30, 2004. The analysis showed that the percentage of males using ED drugs between the ages of 20 to 55 increased from 31.6% in 1999 to 52.6% in 2004, representing a 66.5% increase; while the percentage of claimants 56 to 70 years of age decreased from 68.4% in 1999 to 47.4% in 2004, representing a 44.3% decrease. As illustrated in the graph below, each group is approaching 50% of the claimants in 2004.



Possible reasons for this demographic shift in ED drug usage may include:

- increased awareness of ED in the population and greater acceptance to discuss the disease between patients and physicians
- changes in physician prescribing habits contributing to ED drugs being used in patients without underlying conditions





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- a greater percentage of younger males asking their physicians about ED and the available treatment options

In a previous ESI Canada study, Viagra usage accounted for 1 to 3% of total drug plan expenditures for plans covering Viagra. These percentages are similar to more common drugs covered on the drug benefit, such as those for asthma, high blood pressure, or migraines.

Overall, the Canadian and U.S. studies suggest that the usage of ED drugs is increasing, with a continuing shift to the younger male population. Based on the above analyses, we can conclude that the impact to private health plans for the ED drugs is larger than it was four years ago and their use is increasing amongst those people who are in the workforce.

*Optimizing the Value of Drug and Dental Benefits*

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