

TECHNOLOGY ASSESSMENT BRIEF

Treatment Options for Male Erectile Dysfunction: A Systematic Review of Published Studies of Effectiveness

Report #11

Contacts: Elizabeth J. Adams, RRT, MPH, Karen L. Flynn, DDS, MS and Elaine C. Alligood, MLS

Report Date: October 1999

Primary Objective: To respond to a request to VA's Technology Recommendations Panel (TRP) regarding treatment options for organic erectile dysfunction (ED).

Methods Used: Systematic review of randomized controlled trials published January 1995-January 1999

Background: ED is the persistent inability to achieve or maintain an erection sufficient for satisfactory sexual performance. ED is often associated with chronic illnesses, the medications used to treat these illnesses and psychological or relationship issues. ED can result in withdrawal from sexual intimacy and reduced quality of life. Of men aged 40-70, an estimated 1.7 million veterans may have some degree of ED. Several treatment options exist that are considered initially effective, but for various reasons, many patients stop treatment. To optimize treatment the NIH Consensus Statement on Impotence encourages physicians to try the least invasive treatment first.

This report updates and expands information from the 1996 American Urological Association Clinical Guidelines Panel on Erectile Dysfunction: Summary Report on the Treatment of Organic Erectile Dysfunction. It focuses on FDA-approved therapies for ED with greatest significance to the VA, i.e. oral medications such as sildenafil (*Viagra*), intraurethral alprostadil (*MUSE*) and intracavernous injections of alprostadil (*Caverject*).

Key Findings: Relative comparisons of costs, contraindications, side effects and patient acceptability profiles are difficult since randomized controlled trials directly comparing the available treatments do not exist. • Inconsistent or lack of clinically relevant reported outcomes, insufficient long-term follow-up and selection bias of enrolled patients further limit generalization from existing research. • The number of male veterans with ED and their associated treatment outcomes and patient/partner preferences are unknown but are likely significant to the VA healthcare system.

Conclusions/Recommendations: VA produced a guideline on the management of ED, which generally concurs with the results of this review. The guideline does not recommend the use of yohimbine and reflects concerns that the literature on *Viagra* may not be generalizable to VA's population. The guideline and this review agree that randomized trials are needed to compare treatment options for ED in veterans or comparable populations. Formal cost-effectiveness analyses should incorporate the trial results to help guide efficient allocation of VA healthcare.