

The Rise of Self-Service Health Care in Urology and Other Specialties

With the arrival of the first approved oral therapy for erectile dysfunction (ED) in 1998, Viagra (sildenafil), made discussing a man's difficulty in achieving an erection less taboo. The "little blue pill", as Viagra is commonly referred to, has revolutionized the treatment of ED. With this new openness concerning a man's sexual performance, we have also witnessed the creation of a massive industry to market ED treatments directly to patients. Call a remote provider or answer a few questions on a web site and your ED medication will be delivered directly to your door. Sounds simple, but studies have shown that many of these drugs are counterfeit and may contain ingredients that may pose serious health risks.¹

We have entered another phase of ED self-service home treatments beyond sildenafil and the other oral agents. Low intensity extracorporeal shock wave therapy (Li-ESWT) to the penis is considered an investigational ED treatment in the US. The treatment is being offered in the some clinical care settings including numerous investigational studies. Men who have ED can now order various Li-ESWT devices for "home use" with high price tags and no "embarrassing doctor's office visits". While many approved ED treatments are covered by insurance, it is highly unlikely any insurance company will be providing one of these devices for home use anytime soon.

There are dangers to patients beyond counterfeit ED medications and the cost of pricey devices that are not yet accepted as a standard therapy. Most patients engaging in self-diagnosis wrongly assume ED is a disease localized to the penis. Patients choosing the "self-service" health care option after self-diagnosis usually seek out the treatment they think best for ED. When using this approach, men may be doing themselves a big disservice.

Dr. Arie Parnham, from the Christie NHS Foundation Trust in Manchester, UK, has noted that ED might well be characterized as the "canary in a coal mine" of men's health.² The finding of ED is not simply about the loss of erections suitable for intercourse but may be associated with many life-threatening and other less serious but important medical conditions. Most prominent of these ED associated conditions is coronary artery disease, with an increased risk for cardiovascular events, myocardial infarction and an increase in all-cause mortality. The arterial flow to the penis is often likened to the coronary arteries. Atherosclerosis can narrow the blood flow to the heart and the penis with significantly differing health impacts. The onset of ED is also associated with diabetes, obstructive sleep apnea and other health conditions. Focusing on the goal of simply achieving an erect penis may not be beneficial to a man's overall health.

If a man is worried about prostate cancer there is a self-service option for that too. Recently, the FDA granted 510K clearance to 23andMe's direct-to-consumer hereditary marker for prostate cancer genetic risk.³ This test is focused on just one mutation, the HOXB13 G84E gene associated with an increased prostate cancer risk. The company is very clear that the test does not assess for all genetic markers for prostate cancer and is not a substitute for prostate cancer screenings. Only time will tell how many men rely on just this one mutated gene for their self-service prostate cancer risk assessment without a full understanding of the very narrow focus of this direct to consumer test and the broader approach to hereditary prostate cancer risk assessment. While HOXB13 is an important gene when mutated, the majority of hereditary prostate cancer related mutations are in many other mutated genes commonly involved in DNA repair such as BRCA1, BRCA2, ATM, BRIP1, and MSH6.⁴

Urology is not alone in the world of self-service health care. Otolaryngology is now dealing with the “Over-the-Counter Hearing Aid Act” for patients with mild to moderate hearing loss. The stated purpose is to make hearing aids more affordable, certainly a noble goal. However, hearing loss may be treatable without purchase of a hearing aid. Clearing ear wax, treating middle ear infections or fluid buildup, or stopping medication such as sildenafil may be all that is needed. Much like ED in urology, hearing loss may herald a more significant health condition. In some cases, hearing loss isn’t merely a side effect of aging, but a complication caused by a more serious health condition. Occasionally, hearing loss may be due to conditions such as tumors (acoustic neuroma), Lyme disease or an autoimmune condition. Keeping with the self-diagnosis theme in ENT, there is now home test for oral and throat cancer available in the United States.⁵ The manufacturer of this test does recommend “consultation with a healthcare provider when needed.”

According to the Wall Street Journal, shifting social attitudes combined with the pandemic have helped fuel the wave of innovations such as telehealth and in home medical evaluations.⁶ Urology and ENT are certainly not alone in this area with self-administered tests and treatments in cardiology, ophthalmology and other specialties becoming available.

Without an evaluation by a health care provider, sometimes these self-service health care approaches may prevent the diagnosis of more serious conditions. Bypassing direct interaction with a provider to diagnose and treat a condition such as ED or hearing loss, may achieve the goals of empowering patients and could reduce health care costs. With too much reliance on self-service health care however, the cost and consequences in terms of missed or delayed diagnosis of a serious or more easily treatable condition, may not be easily measurable.

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