Home Devices: Do They Actually Work?

Although home devices may appeal to patients due to their convenience, often they fall short when it comes to sound science and optimal outcomes.

BY KEVIN C. SMITH, MD

With an increasing number of home-use aesthetic devices on the market, physicians’ number one question about these devices is simple: Do they work? The answer, of course, is complicated and based on a variety of factors. This article explores the potential for home-use devices and examines any potential role for them as part of aesthetic regimens.

DEFINING EFFICACY

Before trying to answer the question, it’s first important to consider the subjective measures of the question. Quite simply, in the realm of aesthetic treatments, whether something “works” or not is often a subjective evaluation. For example, what works for patients and what works by a certain scientifically defined standard may be very different.

More pointedly, under properly controlled conditions with properly chosen subjects, some at-home devices “work” in the sense that they can produce a statistically significant degree of improvement in a carefully chosen patient population. But my patients don’t just want “a statistically significant degree of improvement.” They want real, obvious improvement.

There are many challenges to obtaining good results in office practice, whether for hair removal, intense pulsed light for photorejuvenation, vascular lasers, or treatment of acne. There is always a range of outcomes for any given treatment. Potential users of home devices are never shown information or sets of pre- and post-treatment photos that would help them understand that there will be a range of outcomes, even when standardized treatments are applied to a homogenous-looking group of people.

Patient selection criteria are essential for office or home treatment. Patients considering the purchase of a home device need to have instructions that will give them a reasonable chance of applying inclusion and exclusion criteria to themselves, in order to determine whether a particular device and treatment protocol will be safe and effective in their case.

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WHAT PATIENTS WANT

Putting study flaws and design aside, it’s important to consider the level of efficacy that a patient will want to see in order to recommend a certain device. I have found that patients do not want “a statistically significant degree of improvement” but instead obvious improvement and objective evidence, such as pre- and post-treatment photos. Quite frankly, patients are sick of being systematically and deliberately misled and ripped off. In fact, the level of trust for over-the-counter and non-specialist treatments has
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never been lower, and rightly so.

In order for consumers to obtain good value from a device, both the device and the associated promotional material must satisfy several criteria. Promotional material for the device must make it easy for a potential purchaser to determine whether or not it is likely to be beneficial for that individual. The device and its instructions must be designed in a way that will produce a high probability of successful treatment and a low chance of inappropriate use.

If patients have a bad or unsatisfactory experience, for example with home laser hair removal or home IPL, some may decide that laser hair removal or IPL procedures including those administered by or under the supervision of a physician are a “rip-off.” If a physician attaches his or her reputation to a device by recommending or selling it, the physician’s reputation will suffer if the device is ineffective or harmful.

Home devices attract patients with limited time and money. It can be important to explain to patients that they should conserve their time and money, often by waiting a year or two before purchasing the device. “Let them try it out on someone else for a year or two” is a piece of advice that patients often appreciate.

NOT READY FOR PRIME-TIME

Given the inherent flaws of treatment and study design, in addition to the lack of control for the physician and the risk that poor efficacy will lead patients to misconstrue the value of true dermatologic interventions, home use devices cannot sufficiently be considered “prime time.” Even if they advance to the point of offering real benefits (and some may certainly be better than others), we need to consider the broader impact that the incorporation of these products will be into our treatment armamentarium.

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This article is based on Dr. Smith’s presentation at the 2013 Cosmetic Surgery Forum (www.cosmeticsurgeryforum.com). The 2014 Cosmetic Surgery Forum will take place December 3-6 at the Palazzo Resort & Casino in Las Vegas, Nevada.