

BEING Informed:

What's NEW?

by Debra Latour



What's new in assistive and prosthetic technology for people with upper-limb impairments? Well, here are some items that may be helpful for many of us:

The National Academies of Sciences, Engineering and Medicine has published a book and interactive online guide titled *The Promise of Assistive Technology to Enhance Activity and Work Participation*. Chapter 4 of the book covers the topic of upper-limb prosthetics, including consensus statements about the current state of the practice in upper-limb prosthetics. The chapter further details estimated costs of the various upper-limb prosthetic categories and components and provides indications and contraindications (reasons for or against choosing them). This chapter is available free to download from nap.edu/24740.

Some hot topics include ongoing developments in prosthetic technology, such as

osseointegration (*see page 42*) and pattern recognition for more intuitive control. There also appears to be a more robust prosthetic terminal device on the horizon called the TASKA hand, which will be the world's first waterproof prosthetic hand.

In addition, there are several assistive devices on the market that may improve efficiency for many of us with upper-limb impairments. While speech recognition software has been available for quite a while, several programs, such as "Dragon NaturallySpeaking," continue to improve. This technology enables individuals who are challenged in using keyboards or a mouse to use their voices to dictate documents, including spreadsheets, and to search the Internet. The ScanMarker Air is a portable device that allows the user to quickly scan documents into text without typing.

Another tool is the X-Ar, an exoskeletal arm that supports a user's natural range of motion for diverse tasks at home and at work. Although these devices may be costly, some organizations and even states (such as MassMatch in Massachusetts) sponsor lending programs that permit individuals to trial the devices in the natural environments. While this can help to save money by providing a "try before you buy" option, it also can offer supportive and compelling evidence to present to an insurer or other funding stakeholder.

Speaking of healthcare coverage, when pursuing funding for devices, be sure to read your policy carefully, and avail yourself of advocate services that are offered through many employers as part of a benefits package. If your request is denied, ask for a peer-to-peer review and appeal the decision. 🔄

