



A New App for a Popular Device

The iPad is redefining mobile computing, but at Shepherd Center it's also helping people communicate after stroke or brain injury.

BY AMANDA CROWE, MC, MPH

Since its debut in early 2010, Apple's iPad has quickly become a household name. In fact, this sleek machine is on pace to become the most popular mobile device in history. Only half an inch thick, it's lightweight and has a definite "cool" factor.

But this device is beyond cool for many people recovering from brain injury at Shepherd Center. In addition to unlocking a world of leisure entertainment for patients, the iPad – with its accessible touch screen – has empowered some to be able to communicate basic needs and help direct their own care, despite significant language impairments.

"We normally take this for granted, but when patients can't communicate their needs, they often get frustrated and shut down," says speech-language pathologist Adina Bradshaw, SLP, at Shepherd Center. "Through various applications, the iPad is helping take some of the guesswork out of responding to their needs and providing optimal care. For example, we can tailor a program so they can use the touch screen to tell us when they need to be suctioned or changed, or if and where they are having pain and who they want to see."

Rusty Tant of Rockmart, Ga., can't say enough about the iPad and how

it is helping to enhance rehabilitation for his 39-year-old wife Kristie. She had a stroke in July of 2010, leaving her with severe aphasia, an inability to express speech. She continues therapy twice a week at Shepherd Pathways, the hospital's outpatient treatment facility for people with brain injuries.

"It was a mindless game of charades for a while," says Rusty, who desperately tried to understand her attempts to communicate non-verbally and through a handful of words. "Even if she told me she wanted fruit, I didn't know what kind she wanted. Now she can easily show me exactly what she wants."

Kristie, who only has use of her left arm, had relied on a bulky notebook of images that she would have to flip through to find what she wanted. With the iPad, she simply touches the screen to shuffle through a virtual picture bank to select what she wants – even her pick of restaurants for the night. She also uses her iPad to set reminders to take her medication, listen to music and keep up with friends and family on Facebook.

Of course, some of the downloadable applications that make this possible come at a price. Although one of the aphasia apps Rusty considered

is free, the other cost him \$200 out of pocket and some can total \$400. "I decided to download both because you can't put a price tag on this," Rusty says.

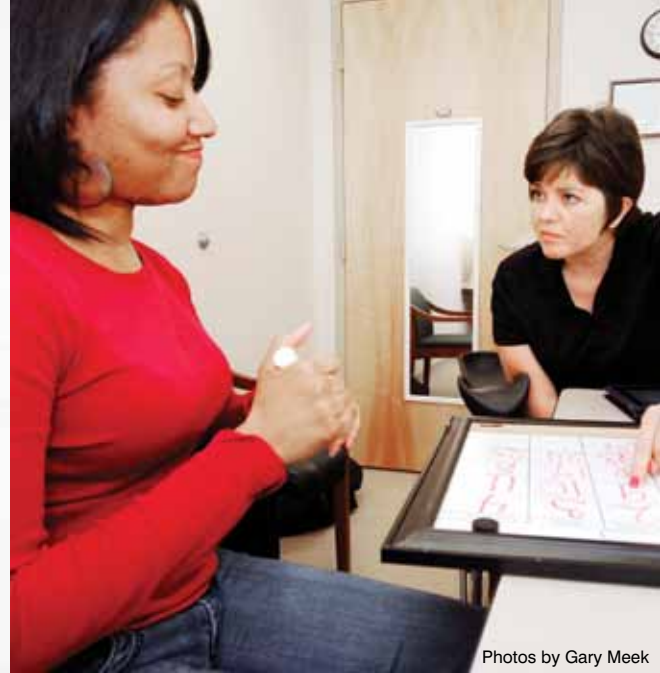
He believes the device has helped boost her spirits, keeps her connected and gives her a sense of independence – all of which are making a difference in her recovery. "Now, you don't see her without it," he adds. And she is not alone.

"When patients use the iPad to communicate their needs, you can see the weight lifted off their shoulders," Bradshaw says. She and other therapists at Shepherd work with patients to help select and tailor appropriate iPad apps to meet their needs and capabilities. They also train them on how to access and use the programs and switch applications.

In addition to using it to help overcome impairments in language, patients are turning to this portable device to:

- Help with time management;
- Keep up with daily medication schedules, especially for those with memory problems;
- Stay connected to family and friends through social networking or watching family events from the hospital using Skype;





Photos by Gary Meek

Speech-language pathologist Lateia Scott leads Kristie Tant, right, in speech therapy using an iPad.

- Access other leisure activities such as reading a book, listening to music and playing games;

- Share photos of extended family members to help serve as a reminder.

“But before going out and buying an iPad and downloading lots of apps, which could leave patients frustrated, they should talk with their health care team,” occupational therapist Erin Dichiara advises.

Despite the many benefits of the iPad, it can be a challenge to make it accessible for some patients.

Fortunately, for those who are unable to touch or control the screen because of physical limitations, there are now several mouth sticks on the market to make using the iPad viable for more people.

“If someone is cognitively able to figure out what is on the screen, they can now physically access and benefit from it,” says Ruthie Fierman, OT, who works in Shepherd’s Assistive Technology Center.

While the iPad does not take the place of more advanced and expensive assistive technologies, it appears to be a positive tool in recovery. Because so many people have or know someone with an iPad, it makes it affordable and convenient, too.

“Our first approach is always to leverage whatever technologies a patient has available,” says John Anschutz, director of the Assistive Technology Center. “Many clients are likely to have an iPad these days, so it gets to the affordability issue. But we must remember, this is just one tool in the arsenal of assistive technologies available to clinicians, and it won’t be the answer for everyone.”

For example, some people using voice control have to use a very powerful computer with lots of memory to improve accuracy, and the iPad doesn’t fit the bill.

“We deal with each patient individually,” he says. “If they bring an iPad, we are going to help them get the most out of the device for their situation and for what they want it to do, but it often involves other technologies, too. There are so many new applications coming out, who knows what will be available next month?”

In the meantime, the iPad appears to not only give certain patients the tools to help express their needs, it also provides a little – and probably much-needed – escape from their day-to-day rehabilitation, especially while in the hospital.

“When patients use the iPad to communicate their needs, you can see the weight lifted off their shoulders.”

– Adina Bradshaw, SLP



To read more of this article and view more photos, visit www.shepherdcentermagazine.org.

Some of the more popular iPad apps for people with brain injury include:

- **Small Talk Aphasia**, free app, www.aphasia.com
- **Proloquo2go** www.proloquo2go.com
- **VAST Speak in Motion Trial** www.speakinmotion.com
- **Talk Assist** mubaloo.com
- **iCommunicate** www.grembe.com
- **Verbally**, free app, verballyapp.com