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Medicine that talks

By LEE BOWMAN - Scripps Howard News Service

Time to take your pill.

You know it is because your cell phone or other hand-held electronic device just issued you a reminder in a text or voice message. Or maybe an alarm set on the cap of your medicine bottle chirped, re-setting for the next dose as you replace the cap.

A while later, as the pill makes its way through the digestive system and dissolves, a tiny radio chip attached to it emits a weak signal that's recorded by a pager-sized sensor on your belt, documenting that the medicinal mission was accomplished.

The device may go on sending a wireless signal to your doctor or nurse, and may even update your Web-based electronic medical record.

If this all seems a bit of futuristic excess to ensure drug compliance, rest assured that all these technologies already exist and most are commercially available.

And the nagging may be needed. Studies indicate that only half to perhaps as few as a third of seniors take prescriptions as they're supposed to all the time.

The solution may be as simple as the "Beep N Tell" medication reminder cap that plays a voice recording from the patient or a caregiver that can go off as many as 24 times a day; or as complex as Medsignals, which features both the alerts and automatically passes on data to a computer database.

Some of the innovations require more active participation. At a recent conference on "mobile persuasion" techniques held at Stanford University, a company called myFoodPhone Nutrition presented its service designed for camera phones.

Users take a picture of their plate at each meal and build an online food journal. A team of nutrition coaches and advisers analyzes the meals weekly and provides online counseling about what might be changed.

Downloading what you're eating is one thing, but one of the big sticking points for tracking drug intake is the still-garbled world of electronic medical records. Industries are still wrangling over standard formats for medical information, but a bigger problem is being able to ensure that all the health care a person receives is logged in, and that everyone who should be able to access the information can do so, but no one else.

Health insurers and a host of private services are establishing personal health record sites with password protection and other safeguards, and surveys show most patients like the idea of being able to access their personal health records.

But polls also show they're anxious about who else might peek, and there are thorny intergenerational issues about whether adult children caring for elderly parents should have full access, or parents of adolescents.

Still, there's evidence that a little tattling about what you're taking can help.

For instance, in Wyoming, an information management system called RiteTrack is used to follow how supplies of nicotine gum or lozenges are dispensed for each client in the Wyoming Quit Tobacco Program.

People in the program get vouchers to help pay for the drugs but must also enroll in a telephone counseling program. The counselors use data about the quantity of gum and lozenges the smoker's been getting to help guide them in kicking the habit. Studies have shown that tele-counseling can double a person's chances of quitting over using self-help material alone; and nicotine replacement therapies double the odds yet again.

As far as tattletale pills go, they're the next generation of pills and devices that are already used by doctors to take various images of our innards.

Kodak filed a patent on the radio-frequency technology last month, but company officials didn't outline any timetable for bringing out a commercial product.