

Telemedicine: See your doctor without leaving the house

BY DR. OLEG REZNIK
SPECIAL TO THE BDN

Imagine sitting at home with a medical problem. You ponder calling your doctor for an appointment, but you don't feel well enough to leave the house. Instead, you power up your computer or reach for your tablet or smartphone. Within a few taps or clicks, you're looking at a live video image of your doctor and speaking directly with him.

Welcome to the world of telemedicine. This is not a vision of the future a few years hence. I use it right now in my practice. This technology has been used for several years to provide specialist access to rural and remote clinics all over the U.S., including Maine. Emergency departments use telemedicine as well in less-than-acute cases. This audiovisual capability allows health providers to observe patients' signs of illness and overall demeanor and to get an overview of how sick the patient is.

With a live video encoun-

ter, my patients feel much more connected than with just a phone conversation. I can see their faces, read their body language and respond to changes that otherwise may be left undressed, all while having the full support of my office staff to coordinate additional testing, referrals and treatments.

Imagine a typical telemedicine visit with your provider. You explain and demonstrate what troubles you. Your provider asks a few more questions, asks for your blood pressure and heart rate, taken from a home blood pressure monitor, which is perhaps even connected wirelessly to your computer, phone or tablet. Similar home devices are also available to measure body temperature and oxygen saturation. Following this virtual visit, your provider might order additional tests, prescribe treatments, make referrals and arrange follow-up.

You have avoided going to the emergency room or to the busy doctor's office and may have even avoided



Dr. Oleg Reznik of St. Joseph Family Medicine

going anywhere, depending on the problem.

Another advantage of this approach is that the distance does not matter; providers can evaluate a patient who is traveling on business or who lives in a remote location.

Many conditions can often be remotely treated just as effectively as in an actual office visit. These include mental health and addiction treatments; follow-

up after common chronic illnesses such as hypertension and diabetes for patients who usually already have a blood pressure and glucose meter at home; or asthma and COPD follow-up with patients who have a peak flow meter and pulse oximeter at home. Weight management and congestive heart failure follow-up can be managed remotely with the help of a home scale. Acne and many other

issues can be followed by videoconferencing as well.

The illnesses my staff and I address range from milder problems, where the patient is reluctant to travel due to diarrhea, vomiting or flu symptoms, to more serious conditions sometimes requiring an extensive remote evaluation and sending the patient to a local hospital for urgent lab work and imaging.

When used appropriately, telemedicine can bring the patient peace of mind or enable the provider to begin a plan of treatment much sooner.

Of course, it is not suitable for every visit. There are several important limitations for providers to keep in mind, including the fact that they did not physically examine the patient. Providers need to make an extra effort to be sure their patients understand instructions and that a clear and close follow-up plan is in place. Patients must realize that there is always the possibility they might be asked to come in for a physical office visit or go to the ER after a telemedicine visit.

I personally enjoy being able to reach my patients at times when they need help but prefer not to leave their homes. I am very excited about what the future will bring. Like any new technology, telemedicine has the potential to grow exponentially in a few short years. In the near future, I envision remote electronic stethoscopes and cameras allowing high-definition images of throat, ear and skin lesions becoming more accessible, providing even more opportunities for remote health care.

The same goes for portable ultrasound and X-ray which, combined with home care nursing, may allow patients otherwise confined to a hospital to receive care in the comfort of their homes — and at lower cost — with the help of telemedicine.

Dr. Oleg Reznik is a St. Joseph Family Medicine physician who cares for employees of The Jackson Laboratory in Bar Harbor

Portland Wheelers acquire tricycle fleet

PORTLAND — Startup nonprofit Portland Wheelers has acquired the first of a fleet of adaptive tricycles and offers free rides to people with a wide range of physical and cognitive disabilities.

These recreational rides offer passengers (“wheelers”) access to the outdoors and the thrill of biking on local trails. Rides are provided on electric-assist, custom tricycles. Designed for safety and security, they're specially engineered for use by people with disabilities. They come apart in two sections. Once apart, the front section — a stand-alone wheelchair — can be taken inside to pick up and return the wheeler.

Rides take place in Portland and Scarborough during the day, evenings and weekends. Soon, rides will expand into South Portland and Westbrook. Most wheelers live in resident facilities, but arrangements can be made to meet others at their own home.

Portland Wheelers has given more than 75 rides to wheelers of all ages and with many kinds of disabilities. The organization has 10 trained volunteer pedalers (“pilots”), all certified as safe and sensitive to riders' needs. Due to growing demand, the group always need more pilots.

Portland Wheelers also seeks donations to grow its fleet and support its programming.

Color run set for Sept. 19 in Machias

MACHIAS — Join Healthy Acadia and partners in Machias Saturday, Sept. 19, for “A Dash of Color” run.

The annual 2-mile, non-competitive walk/run is sponsored by Healthy Acadia in Washington County, the Machias Bay Area Chamber of Commerce and the University of Maine at Machias.

The 2-mile course starts in the University of Maine at Machias' Fitness Center parking lot and ends at Station 1898 on Main Street.

Lineup begins at 8:30 a.m. for the 9 a.m. event.

The \$20 per-person entrance fee (\$15 if part of a team of two or more; \$25 on the morning of the event) will help support Healthy Acadia's youth programs in Washington County.

The registration deadline is noon Friday, Sept. 18. Limited late registrants will be accepted the morning of the race until 30 minutes before lineup. For information or to register, contact Angela or Terri at 255-3741 or email angela@healthy-acadia.org.

Recovery 5K to be held in Augusta

AUGUSTA — Crisis & Counseling Centers will celebrate recovery from

mental health and substance abuse at the agency's second annual On Track to Recovery 5K Walk/Run Saturday, Sept. 19, at the Kennebec River Rail Trail in Augusta.

All proceeds support C&C's Client Emergency Fund, which helps clients access basic needs.

This professionally timed event is open to the public and includes a Kids' 1K Fun Run, free event T-shirts, prizes, raffle items, a post-event recovery celebration and a Kid Zone featuring an ice-cream sundae bar, face painting, cutout photo-shoots and games.

In lieu of paying a registration fee, participants are encouraged to pledge to fundraise. Adult registration also is available for \$25 per person, and youth registration, ages 2-11, is \$12 for the 1K Fun Run. Team registrants earn an additional discount and will compete for a trophy against other teams.

Check-in will begin at 7:30 a.m., and the Kids' 1K Fun Run will start at 8:30 a.m., rain or shine. The 5K Walk/Run will begin at 9 a.m.

To register visit CrisisAndCounseling.org/GetInvolved/5k.

For information, contact Public Relations and Fundraising Manager Courtney Yeager atcyeager@crisisandcounseling.org or 213-4523.

Bauer to keynote veterans conference

FARMINGTON — The keynote speaker at the fourth annual Bringing Worlds Together Conference for veterans, family and community members to be held 9 a.m.-4 p.m. Saturday, Sept. 19, at University of Maine Farmington, will be the Rev. Peter E. Bauer, a United Church of Christ minister for more than 34 years.

Rev. Bauer is also a licensed clinical social worker, a licensed marriage and family therapist, a board-approved supervisor for both licensed clinical social workers and licensed marriage and family therapists, and a licensed chemical dependency counselor. He works for the Veterans Affairs' Frank Tejeda Outpatient Clinic in San Antonio, and teaches as an adjunct professor in the department of social work at the University of Texas.

Kevin Mannix will be a featured speaker at the conference, hosted by Tri-County Mental Health Services with support from the United Way of the Tri-Valley Area, Bank of America, and many community volunteers. The conference also features nine different workshops on topics ranging from confronting post-traumatic stress disorder to marijuana and public health.

For information and to register for this free conference, visit TCMHS.org or call Jerry DeWitt at 783-9141, ext. 228.

Atwood

Continued from Page C1

derstand it's so important, particularly for laypeople, to get a better understanding of their inner selves. Others suffer from a particular disease and want to help physicians understand the disease better so future generations don't have to suffer that much.”

Whatever the reasons, the results of people's donations are mind-boggling. One specimen is called “The Totally Expanded Body.” Ordinarily, you wouldn't be able to see all the muscles and organs because they're tightly packed together, but spaces were created between the various parts, while the organs and muscles hang from fine wires, giving us a 360-degree, three-dimensional view of the inside of the body.

“The Orthopedic Body” is in a dancer's pose and, if you look closely, you'll see that it has had a few joint replacements. Also, the jawbone has been partly replaced and various bones have been stabilized with fixation devices and metal pins and plates. Look again and you might also notice a pacemaker.

Mark Thompson, senior vice president with the Gold Group, the Massachusetts entertainment marketing and promotions company that brought the science center and “Body Worlds” to Portland, was especially interested in the joint replacements.

“I'm sort of at that age,” he told me. “To me, the artificial hip was really powerful because it just sits right in perfectly. Not that I thought it wouldn't, but when you see it for real, it's got a different feel.”

The technique that gives us such personal and accurate views of the human body was developed by Whalley's husband, Gunther von Hagens. The idea came to him while he was an anatomy assistant at the University of Heidelberg's Institute of Anatomy in the mid-1970s.

“I saw my first specimen embedded in a polymer block,” he states on the “Body Worlds” website. “I wondered why the polymer had been poured around the outside of the specimen as having the polymer within the specimen would stabilize it from the inside out. I could not get this question out of my mind.”

The process he eventually developed, which is called plastination, replaces bodily fluids and fat with fluid plastics that harden after going through something called vacuum-forced impregnation. It took von Hagens six years to refine the process and it wasn't until the early 1990s that he was able to do large bodies, which are called plastinates. The plastinates are in poses that show different anatomical structures and simulate how our bodies work when we perform different activities.

Individual body parts also are displayed, sometimes to show the effects of lifestyle choices and diseases — the

black lungs of a smoker or the shrunken brain of a person with Alzheimer's. Cross-sections comparing two different bodies demonstrate the toll that obesity can take on internal organs, pressing against the heart, for instance.

Some displays are meant to simply teach us about our anatomy. When Zeke Wyatt, an assistant manager at the science center, first saw the exhibit, he said he didn't know what to think.

“I have a weak stomach sometimes,” he admitted, “so I needed the first five minutes, but I couldn't stop looking at it. From the first exhibit all the way to the end, I learned things — things that you know intellectually from biology class but you don't have that visual of them. It creates almost this tactile experience for you without touching them.”

“Body Worlds” is more than an anatomy lesson,

said Joseph Gold, principal for the Gold Group.

“It's edutainment,” he said. “We're going to entertain you and you're going to learn something. People come to ‘Body Worlds’ and they see how lifestyle choices affect the human body and really have the opportunity to change their health. It really has changed people.”

It may have changed some people, but over the 20 years “Body Worlds” has traveled the globe, it also has invited controversy. In 2004-05, the California Science Center conducted an ethical review, which is available to read on the “Body Worlds” website.

Bearing in mind that his role is to promote “Body Worlds,” Bob Gold recalled the first time he saw it.

“I was in Philadelphia at the Franklin Institute. We were doing work for them and the head of the museum said it was the most beautiful, the most spectacular,

the most engaging exhibit she had ever seen. At that point, I had only seen photographs and I wondered how she could say that. And then I went to see ‘Body Worlds’ for the first time and she was absolutely right. It is a spectacular exhibit.”

You have until the end of the year to decide for yourself if “Body Worlds” is a spectacular exhibit. The Portland Science Center is located at 68 Commercial St. in Portland on the Maine Wharf. Check out portland-sciencecenter.com for hours, ticket prices and directions.

Diane Atwood was formerly the health reporter on WCSH6. She's a regular guest on the WCSH6 “Morning Report,” a free-lance health and wellness writer and blogger. Read her BDN blog, *Catching Health*, at catchinghealth.bangordailynews.com.

COLLEGE FAIR PREVIEW

Geared toward students and it's about making college affordable, decorating a small space, making the transition to college life easier, and info from colleges around the state.

September 18th in your Bangor Daily News