**Article of the Week (AoW) Directions**

1. Mark your confusion – either highlighting or underlining.

2. Mark up the text. Annotate the article with comments, questions, inferences, etc. You can use a variety of sentences, phrases, and symbols to show your thinking.

3. Write a developed paragraph response to one of the prompts below.

**Like having a doctor on your laptop, or in your pocket.**

Source: McClatchy Washington Bureau/adapted by Newsela staff

WASHINGTON, D.C. — Samantha Cunningham was halfway through a five-hour trip to a music festival when she realized she had left her asthma medicine at home.

Her options seemed limited. She could go back home, pick up her asthma inhaler and be late for the concert. She could also pay a $100 minimum fee to get a new prescription at a walk-in clinic, where she could go without a doctor's appointment. Lastly, she could go without her medicine "and hope that they had a rescue machine at the festival on the off chance I had an asthma attack, which, of course, wasn’t a very inviting prospect,” Cunningham said.

Then a friend suggested American Well, a service that lets doctors see patients on video through the Internet or a smartphone. Cunningham, 23, downloaded the phone app and entered her personal information. Soon, she was discussing her problem face to face with Dr. Minoti Parab, a family doctor in Charlotte, North Carolina, who sees only “telemedicine” patients like Cunningham on her home computer.

The app download and visit with Dr. Parab took about 30 minutes and cost $49, far less than a traditional office visit. When it was over, Cunningham had a prescription for a new asthma inhaler that she filled at a pharmacy before arriving on time for the concert. “It was really a perfect solution,” she said.

## **"Virtual Medicine"**

It’s also a perfect example of how telemedicine, using electronic technology to provide remote patient care and to exchange medical information, is transforming health care. Along with American Well, companies like Teladoc, Doctor on Demand and Specialists on Call host video consultations. They serve consumers, employers, insurers and hospitals. Large hospitals also use telemedicine to make their specialists available to smaller hospitals.

Technology is providing more and more solutions to medical problems. Robots help treat emergency room patients and let specialists diagnose stroke victims far away and recommend life-saving medication for them. New phone apps let users get full eye exams with their smartphones. Other technology allows therapists to monitor the moods of mental health patients on a computer screen and text them instructions or warnings. These and other developments are expanding the possibilities of telemedicine, or “virtual medicine” — another term for treating patients from afar, along with mHealth, eHealth and telehealth.

Telemedicine could save nearly two-thirds of unnecessary emergency room visits and one-third of doctors' visits, according to a study. The market for telemedicine is expected to grow, as patients get comfortable and it becomes routine for simpler problems.

“The basic economics of virtual medicine are just kind of punch-you-in-the-face clear and obvious,” said David Francis. He is the managing director for health care information technology at RBC Capital Markets, which published the study.

## **More Specialists In More Places**

If Medicare, the government-run health insurance program for Americans age 65 and older, expands telemedicine coverage, the potential for the technology is even larger. Medicare now pays for some telemedicine services for rural patients. Yet because of the way telemedicine services are billed to the government, telemedicine is more expensive than regular medical services, an analysis by the federal government found.

A number of proposals in Congress would expand access and refunds for doctors offering telemedicine services under Medicare. The proposals have been stalled because Congress can’t judge the cost of expanding coverage.

One area legislators and health care experts are looking into is stroke care, where speed can make a difference. With telemedicine, neurologists — doctors who specialize in treating the brain — can work from afar with doctors on the scene and suggest treatments that improve the chance of recovery. In a nation already short of neurologists, technology helps put more specialists in more places.

“The numbers don’t lie,” said Dr. Til Jolly, chief medical officer at Specialists On Call, a telemedicine company. “There are not going to be all these physicians we need in all the places we need them, so we have to figure out a better way.” Specialists On Call has more than 200 doctors who provide on-demand video consultations to hospitals in 33 states.

## **Mobile Apps On The Rise**

While video conferences are the bread and butter of telemedicine, mobile apps are the new frontier. Phone apps seem an especially good fit for mental health uses. Centerstone, a company that provides mental health services, said it saw a drop in hospitalizations and emergency room visits among 65 patients who used monitoring devices, including a phone app. The app, Ginger.io, can spot when the patients are showing symptoms and alert their case managers. Patients really liked the apps and felt they had more control and understanding of their illnesses, said Bob Siegmann, a Centerstone executive.

The apps were provided along with other extras, such as more access to case managers to help patients. It’s hard to judge how much the technology contributed to the final results by itself, said John Torous, a doctor of psychiatry at Harvard Medical School. The lack of research and proper studies on the growing number of apps for mental health should make therapists stop and think, he said.

It's hard to decide now what are good and bad apps, Torous said. “We’re not thinking of them medically and asking the medical questions: What are the risks and benefits of use?" he said. "For most of these things, we just don’t know.”

**Respond to one of the following prompts. Use the a separate sheet of paper.**

1. What are the benefits of ‘telemedicine’? What are the possible disadvantages? Explain.
2. Would you use an app for a virtual doctor’s visit? Why or why not?
3. Select a word, phrase, sentence, or paragraph and respond to it.