

Engaging Patients Using Cell Phone Technology: Why? Patients forget 40-83% of their doctors' advice.

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The Problem: Patients forget 40-83% of what their doctors tell them *immediately*.

Studies have been conducted since the 1960s to see how much information a patient remembers after an office visit. The range has been variable, but in the most successful study, on average, patients remembered 60% of what *they'd just been told*. In the study with the worst results, they remembered only 17%. And one study noted that 48% of what they thought they remembered was inaccurate or misconstrued!

A meta-analysis of the studies has been considered, but it was decided it wasn't feasible because of such different styles of the studies.

Since about 2000, the studies have mainly focused on providing an intervention to improve patient recall, and measuring its effect. Some are helpful—others not. None raise the percentages of recall a great deal.

The Result: Patients can't follow their doctors' advice if they can't remember it.

Doctors are harsh when it comes to patient compliance. "How can I help them if they won't do what I tell them?" doctors storm, when patient-after-patient comes through their offices with their uncontrolled chronic diseases.

Yet, scientific studies show that patients *can't remember* what the doctor told them. Any doctor who reads this should feel some remorse. As a physician who's practiced since the '70s, I am particularly aggravated that no one (medical guru?—journal article?—government bulletin?—continuing education lecture?) brought this to my attention. I was taught to sit there and talk to the patients and then they would remember what I said, right? Wrong. And science *knew* this fact long before I discovered it in the literature two years ago—why didn't someone say something? Why are we wasting our time when these are scientific facts about memory? Are we scientists or not?

There's even worse news: What patients *do* remember is likely to be the medications you give them and their treatment plan (a lot of these studies were done in cancer patients). What they *don't* remember most is—ta-dah—what you tell them *to do*. So they don't remember you told them to walk 10,000 steps a day, or to exercise 4 times a week. They don't remember that you told them to eat a low cholesterol diet. And they don't remember what you said when you said, "And be sure to get back to me if . . ." (a very dangerous forgetting).

One Solution: www.YourDoctorsAdvice.org (YDA).

The Cautious Patient Foundation decided to tackle this problem two years ago, and has come up with an innovative solution, which we believe will be helpful to patient *and* doctor, will be efficient, and will be cost-effective.

(Before you read the next few statements that sound like an advertisement for the service we're offering, let me tell you that we are offering the source code *free* to any person or organization that wants to use it. We believe that *every* patient and doctor should have this efficient tool to help the patient remember what the doctor told him.)

The patient signs up before the office visit with www.YourDoctorsAdvice.org. He picks a login name and password, and then enters his cell phone number. He's given a call-in number, and we ask him to save it to his phone under "DoctorsAdvice" (easier to remember).

Then, at the end of the office visit, as he sees the physician wrapping up, the patient is taught to pull out his cell phone, quick-dial the *Your Doctors Advice* call-in line, and say to his doctor, "I'm going to make a quick note to myself so I don't forget what you've told me." Then the patient starts talking into the phone: "I'm here with Dr. Smith, and he just told me . . ., and . . ., and . . ." If the patient says something wrong, the doctor can correct him; at the end, the patient should ask the doctor, "Anything else?," and the doctor can add some things that the patient may have forgotten so he can repeat them into the phone. The patient hangs up. This usually takes less than 30 seconds. Now, the recording of that day's advice can be picked up on the patient's home computer with the patient's login and password. The patient can listen to it as many times as he wants, share it with family, or take notes on it. There can be many recordings—maybe one that the patient labels "Foot care," and maybe another that he labels "Food choices."

And one part of the doctor's advice can be: "And I want you to listen to this 4 times this week, and 2 times every week until I see you again!"

(The patient doesn't have to type in any account numbers or anything that would slow the doctor-patient visit down—the program recognizes the patient's cell phone number, and routes the recording to the right account.)

The advice can also be picked up using a cell phone.

Patients no longer have to forget their doctors' advice. Doctors no longer have to grumble about non-compliant patients when the patients, *scientifically*, just can't remember what the doctor told them. (It would be nice if doctors just stopped grumbling about non-compliant patients in general—but I'm not asking for miracles here.)

A family can sign up for the service for \$19.95 a year, and use up to five cell phone numbers.

Preliminary Results: The University of Texas Medical Branch at Galveston (UTMB) has been beta-testing *Your Doctors Advice*. The doctors using it there have decided to speak directly into the cell phone themselves, so they can give the advice they want. We're not sure that this will have the best end results. We've found that when patients are shown beforehand how they will be asked to repeat advice back, then they've been really good at it, and sometimes doctors have said, "I didn't know I said all that."

We've identified something we're calling "listening with intent to repeat." When patients know that they're going to have to recall and repeat the information the doctor is telling them, there seems to be a shift in the listening pattern to actively organizing the information in their heads so they can repeat it immediately. These are preliminary findings, but very encouraging.

Next Step for YDA: The exciting next step for us is to put doctors' advice directly on the home page of YDA, where it will be accessible for *anyone*, even if they don't have an account. There will be a drop-down menu, the patient will find their doctor's name, the name of the recording (audio or video), and then hear their doctor talk on a certain subject.

For example, a doctor sees a patient and diagnoses hypertension. Now the doctor needs to give the "hypertension advice" to this new patient. Instead of going into all that, the doctor asks, "Do you have access to a computer?" If yes, then the doctor says, "Okay, go to www.YourDoctorsAdvice.org and use the drop-down menu to find my name, and then listen to "High Blood Pressure Advice." And then, because medicine is also an art, the doctor also tells the patient if there is *specific* advice for that particular person.

UTMB doctors will be doing the first recordings. Then we will take requests from doctors across the country who want to put their advice on the interface. We envision that not every doctor will need to do this—we envision that Dr. Smith will like the way Dr. Jones gave first visit hypertension advice, and then ask his patient to go home and listen to "Dr. Sam Jones, High Blood Pressure Advice."

Future Use of YDA Technology: Although our technology is not unique, the combination and application is.

The Chief Medical Officer at UTMB, upon seeing YDA in action, said, "The question is not whether or not this is useful—it's how many ways it can be useful."

For example, in the hospital, the cell phone the patient has is unique to him. What if the cardiologist who saw the patient that day grabbed the patient's cell phone and left a message for the other docs who see him that day. (The next doc could dial the hear-recording number, and listen to the cardiologist's message.) What if the attending physician left a message that all the family members could hear? Communication among physicians and between staff and family members, using a device that everyone now has: a personal cell phone.

Shout-Out to Hospital Execs and CMS: If your discharge patients had this technology, then you could record the discharge instructions. Then the patient, family, and anyone else who helps with that patient's health would *know* what the instructions were. No literacy issues. No lost papers. And you could expect decreased re-admissions in the month following.

About Cautious Patient Foundation: The Cautious Patient Foundation is a division of Patient Always First, a 501(c)(3), whose mission is improving healthcare quality and patient safety. Find out more at www.CautiousPatient.org.

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