

New Pill That Can be Digitally Tracked Raises Orwellian Concerns

How much would a chocolate company pay to know exactly when you or the lady in your life is experiencing PMS symptoms in an effort to more effectively target ads? If that level of corporate involvement in your medical records upsets you, you're not going to like the new digital ingestion tracking system approved by the Food and Drug Administration.

This new tracking system is designed to address the issue of nonadherence, where patients do not follow through on prescribed medical treatments. The treatment, in this case, is called Abilify MyCite and it's made by Japan-based Otsuka Pharmaceuticals. The actual medication portion of the Abilify MyCite system is brand-name aripiprazole, an antipsychotic drug used for treating schizophrenia, bipolar disorder, and as an add-on treatment for depression in adults. "Being able to track ingestion of medications prescribed for mental illness may be useful for some patients," said Mitchell Mathis, M.D., director of the Division of Psychiatry Products in the FDA's Center for Drug Evaluation and Research. "The FDA supports the development and use of new technology in prescription drugs and is committed to working with companies to understand how technology might benefit patients and prescribers."

How It Works

The pill part of the system is the simple part. Abilify MyCite comes with a web-based dashboard that allows a patient to track their actual drug ingestion, daily activity level and self-reported mood and sleep. The sensor that tracks that is roughly the size of a grain of sand and activates upon contact

with fluid in the stomach. It detects and records the date and time the pill was taken and relays that to a patch worn by the patient. The patch then sends all of that to the patient's smartphone. When the patient gives consent, caregivers or medical professionals are able to see all of this data, though the system does not register the ingestion in real time or emergencies. The patient is able to revoke those permissions at any time.

Is It Worth It?

The system itself does not actually increase drug compliance. Both Otsuka Pharmaceuticals and the FDA take care to note that the product does not fix nonadherence, and it remains to be seen if the patients with the first illnesses targeted by this medication will respond positively. While nonadherence is an expensive issue, schizophrenics and those with bipolar frequently skip medications because they don't like the way they feel when on them or dislike the feeling of being controlled or manipulated. A pill that tracks their compliance is probably not going to change that.

Who Does This Product Work For?

Imagine a system where medical compliance is a condition of benefits without a way around it. Can a digital ingestion tracking system create a situation where your insurance charges you more for choosing not to take a prescription?

The more connected we become, the more difficult it is to keep information private. How secure will this data be? According to Kimberly Whitfield from Otsuka Pharmaceuticals public relations department, "the data is encrypted while it is stored in the Health Insurance Portability and Accountability Act (HIPAA)-compliant cloud environment, and the cloud service provider does not have a decryption key." While all of these makes this information much more secure than your average

social media profile, information leaks happen across every sector.

The company is clearly taking precautions, but can the information be stopped once it's out there?

Recommended Reading:

- *How to Detoxify From Antibiotics and Other Chemical Antimicrobials*
- *How to Kill Fungal Infections*
- *Three Homemade Toothpaste Recipes – Better Oral Health for Less Cost*

Sources:

- *FDA Approves First Digital Pill That Can Track Whether You've Taken It – NPR*
- *FDA approves pill with sensor that digitally tracks if patients have ingested their medication – FDA*
- *FDA approves 'trackable' pill – BBC*
- *Experts raise eyebrows at digital pill to monitor patients with schizophrenia – Ars Technica*