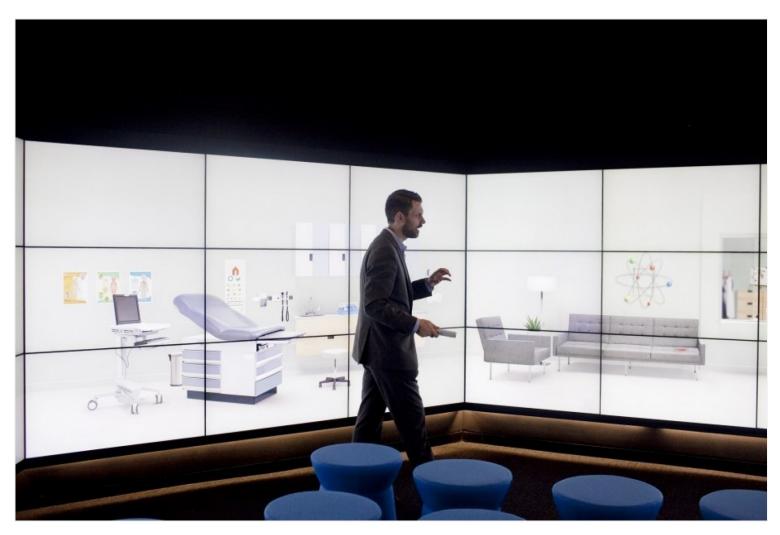
IBM Watson, CVS deal: How the smartest computer on earth could shake up health care for 70m pharmacy customers



Fredrik Tunvall, a senior client engagement leader at IBM Watson, goes through a demonstration in an "immersion room" in New York City. (Andrew Spear/For The Washington Post.)

The artificial intelligence system known as Watson is going to supercompute your health. IBM and CVS announced on Thursday that they will work together to come up with algorithms that use physiological indicators and red-flag behaviors to predict whose health is fine and whose may be on the decline. The first stage of the deal will focus on patients with chronic conditions, such as heart disease and obesity, but after that the sky's the limit. Here's why the deal is poised to shake up the way you think about health care.

[Next stop for IBM's Watson: Your local CVS pharmacy]

Reach: CVS has 7,600 retail stores, about 1,000 walk-in medical clinics, and a pharmacy program with more than 70 million participants. That's nearly 22 percent of the U.S. population. The IBM-CVS partnership could transform the roles of a pharmacist, retail clinic practitioner and your primary-care doctors and specialists. A routine trip to the drugstore could involve consulting with Watson at a kiosk about your health or having your pharmacist let you know to alert your doctor that the medicine you're taking is not working as well as you both think.

Big data: With mobile phones everywhere and wearable fitness devices proliferating, the average person is predicted to generate more than 1 million gigabytes of health data in their lives. IBM is working with Apple, Johnson & Johnson, and Medtronic to use Watson to glean insights about people's health and the effectiveness of interventions. The company also recently purchased health data companies Explorys, which spun out of Cleveland Clinic and specializes in predictive analytics, and Phytel, which provides insight for hospitals on groups of patients. Adding CVS data to the mix (which is not part of this deal but may be on the table later) may allow the companies to learn huge amounts about consumer behavior and how it impacts their health.

Control over your own data: One of the most frustrating things for patients can be a lack of access to their health or prescription history and the ability to share it. This is one of the things both IBM and CVS officials have said they hope to solve.

Cancer: While this isn't one of the conditions targeted in the first stage of the deal, IBM has several partnerships with leading cancer centers to train Watson to be a cancer expert. IBM has said it hopes to roll out the cancer

adviser service to community physicians. Could they be used by the nurse practitioners who staff CVS Minute Clinics as well?

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