

Verily unveils investigational Study Watch for use in clinical trials; non-invasively tracks cardiovascular signals, movement, and other (non-diabetes) data - April 19, 2017

On Friday, Verily unveiled the Study Watch on [its blog](#) - the investigational device (i.e., not for sale) is designed to passively and non-invasively capture cardiovascular signals (ECG, heart rate), movement disorders, electrodermal activity, inertial movements, and other metrics. The watch comes with a notable feature set: (i) up to one-week battery life; (ii) weeks' worth of raw data storage, so there is no need for frequent syncing; (iii) real-time algorithms on the device; (iv) potential for over-the-air updates; and (v) a low power and high resolution display.

In what is clearly a deliberate user experience decision, only time, date, and certain instructions are displayed to the user on the chic interface, while all biometric data is collected in the background - in some ways, this is a lot like FreeStyle Libre Pro! While not directly diabetes-related, this development shows Verily's commitment to: (i) passively collecting biometric data to build an understanding of disease states; (ii) improving key hardware features like battery life; (iii) combining multiple sensors in a single device; and (iv) preserving the user experience and not just building another quantified self "tracker" device.

The Verily Study Watch will be used in the [Personalized Parkinson's Project](#), a long-term study to pin down the progression of Parkinson's Disease and lay a foundation for the development of individualized therapies, as well as the highly-anticipated [Baseline study](#).

Of course, our first thought was "How could this be used in the diabetes setting?" One answer is that the Baseline Study will track ~10,000 healthy participants for four years. Based on current trends and assuming the study population is representative, some of those individuals may go on to develop diabetes. We also assume the watch's data could be combined with glucose signals to drive behavior change and insights (Dexcom next-gen CGM partnership, Novartis smart contact lens partnership), or become a device component in a larger diabetes program via the Sanofi Onduo joint venture. We also wonder if the Study Watch could be leveraged in CVOTs or other drug/device studies - these data sets could be extremely useful in comparing the day-to-day effects of experimental therapies.



Close Concerns Questions

Q: Will Verily use data from the Study Watch in combination with its diabetes partnerships?

Q: Does the minimalist user experience of Study Watch imply anything about the Dexcom/Verily product - less focus on data, more passive collection, etc.?

Q: Could some of the hardware from the Study Watch be leveraged in Dexcom's next-gen bandage CGM - e.g., battery life, on-device storage, etc.?

Q: Will Verily go to direct-to-consumer with a future version of this device?

Q: Could CVOTs benefit from using such a device?

-- by Brian Levine, Adam Brown, and Kelly Close