Back in the Spring of 2006, I was getting headaches consistently around lunchtime every Saturday. It was really weird. At first I didn’t recognize the pattern, I just knew that my head hurt a lot, and tried to make it go away by popping ibuprofen. The pills kind of worked, but not really. After way too long, I finally realized what must be going on.

One of the classic things everybody knows about Microsoft is that they give employees free soda. It’s a pretty cool perk, but for those of us with no moderation switch, it can get a bit out of hand. When I came back to Microsoft in 2006 to start the HealthVault team, I quickly ran up a Diet Coke habit in the range of sixteen each day. All week – until Saturday, because the fridge in my house doesn’t magically regenerate Diet Coke.

Suddenly it was just blindingly obvious: I was suffering from caffeine withdrawal. Now, a better man than I would have recognized that all that soda probably wasn’t a good idea anyway. But instead, I just switched to caffeine-free Diet Coke and the headaches disappeared. I still spend a lot of time running to the restroom, but that’s another issue altogether!

I love this story because it’s so simple and obvious --- and yet it offers up a clear path to making improvements in all aspects of clinical care:

1. We have to **measure** our bodies over time and space.
2. We have to **correlate** the data we measure to identify patterns.

Doctors measure a lot of stuff to try to understand problems in the human body: labs, imagery, vital signs, and more. But these are all done as isolated snapshots, and all too often patterns that occur over time (weeks, months, years) and space (at home, at work, traveling, etc.) hide away undiscovered.

Historically this was understandable, because measuring the body has been hard and often inconvenient. In order to be useful, the amount and diversity of data required can be significant. But the world has changed, and now it’s easy for anybody to create a holistic picture of their health with data.

This is one of the big reasons we created HealthVault. We recognized the importance of a comprehensive “hub” where people could collect all of this diverse information together, and where smart people could provide analysis tools to look for patterns and trends. For us, the “quantified self” has been a target from day one.

Vaibhav has been part of the HealthVault team for a long time, working with partners and our internal team to constantly improve the service. He’s really done a great job in this book of showing what’s possible when you take a platform like HealthVault, combine it with an ecosystem of innovative measurement devices, and make the data available for analysis in familiar tools like Microsoft Excel. And that’s not all – he walks us through building HealthVault apps for the web and mobile phones, somehow cramming a ton of great information into a pretty manageable read. I hope he’ll inspire an avalanche of new “body hackers” who can help show us what’s possible.

It’s pretty amazing stuff --- and frankly we’ve just gotten started. So have fun!

Sean Nolan, Distinguished Engineer

Microsoft Health Solutions