

Social Data Lab -- United Healthcare Workshop 2012

Executive Summary

On May 7, 2012, executives from United Healthcare and founders of big data and health-related startups came together at Stanford for the Social Data Lab Spring Summit on “*Healthcare, Social Data, and Social Media*”. The purpose was to map the rapidly evolving landscape of health data, and to show possible paths for the second largest health insurance company in the US through this jungle. Throughout the day, we applied a customer centric perspective and analyzed the implications on the business model and the relationship with and between customers.

The emergence of social, mobile, and sensor technologies are all-disruptive forces that will change how insurance companies manage risk and engage with consumers, and are potential areas of opportunity. The focus of this workshop was to examine how United Healthcare can leverage these factors to not only help people live healthier lives, but to help them make better health decisions.

In particular:

- 1) Gain trust of consumers
- 2) Marketing and new customer acquisition. (Specifically, as individuals enter retirement in the US, they now, in many cases for the first time in their lives, need to actively make decisions about their healthcare plans).

Key Takeaways

- Social, mobile, and sensor technologies have led to a surge in consumer health data.
- Given the tectonic shifts in the US healthcare system, insurers will need to forge new ways of engaging consumers as healthcare becomes increasingly consumer-driven.
- The combination of data that customers explicitly and implicitly contribute through social / mobile / sensors can serve as a bridge between insurance companies and their customers.
- Companies such as Massive Health and HealthTap are taking radical new approaches to how consumers can engage in their health and wellbeing.
- While there has been much hype around “Big Data” and healthcare, the value of data is ultimately measured by its ability to impact decisions and changing behavior.

Workshop Notes

Morning Session: Healthcare, Social Data, and Social Media

Social, mobile, and sensor technologies have enabled consumers to engage their health and wellbeing in ways previously not possible. This has resulted in a deluge of data being generated and shared. Devices such as the Withings scale (a “smart” Wifi-enabled scale that enables intelligent tracking of your weight online), Fitbit, and the Nike Fuelband are just a few of examples spurring the “Quantified Self” movement. The social dimension of these products is not only generating useful data but it is impacting our attitudes towards health and motivating behavior change.

One of the key questions is how companies will make use of the “digital exhaust.” Traditionally, this data has been used to drive targeted marketing. Instead, companies should shift to a consumer centric perspective, genuinely starting with the true problems their customers have and the decisions they need to make.

An important consideration is the privacy dimension of health data. Is sharing health data different than other types of data? The answer to this question will have important impacts on social norms. Will carrying a device that measures and tweets my activity motivate me to take the stairs instead of the elevator?

Breakout Session: Design Thinking

Integral to the SDL breakout sessions is a design thinking methodology where user stories are collected, and multiple scenarios are evaluated towards solving a real-world problem. The process, taught by the [d.school at Stanford](#), draws on methods from engineering and design that combines creative and analytical approaches to solve problems innovatively. We asked the participants to imagine that they had access to all the data in the world, and then come up with ideas to solve different problems.

The lab, together with United Healthcare defined the following three scenarios to explore:

- Scenario 1: How to use the social graph to incentive a non-member to become a paying UHC member. In particular, the group brainstormed on how to integrate a consumer’s social health data from sources such as Fitbit, Azumio, The Eatery, and their own medical record data.
- Scenario 2: A caregiver wants to find more ways by which to take care of their loved ones. This can extend to other occasional visitors like cleaning ladies, neighbors, etc. It breaks the traditional healthcare model by rich data collection through various sources, and escalation/intervention only when needed.

- Scenario 3: Someone finds out that they are at high risk for a chronic illness.

The group designed an app that would connect the user with other risk patients in their social graph with the same type of condition. This “condition network” would provide group motivation as well as access to personal advice of people in different stages of treatment for that condition. The app would create a sponsor-ponsee relationship between the doctor and the patient. Sponsors would recommend specific actions the patient can take. They would also have access to external sensor data from the app that would enable sponsors to monitor the patient’s vitals and intervene if necessary.

Domain Experts

To broaden the conversation, the lab invited four experts of the social data space to share their insights and application to the topic of “*Healthcare, Social Data, and Social Media*”.

1. Andrew Rosenthal, Chief Strategy Officer at [Massive Health](#)

As opposed to other start-ups in the healthcare space, which try to motivate change by bringing clinical insights to consumers, Massive Health focuses on user engagement through human-centered design. By creating easy-to-use products that consumers love to use, they are able to create the kind of engagement needed to inspire behavioral change.

Their current product, “The Eatery”, is an app that lets users take photographs of their meals and rate other people’s food. These images are crowd-sourced and rated on a “Fat to Fit” scale.

Analyzing the first 7 months of data, Andrew showed that people tend to rate other people’s food much lower on the health index than they would rate themselves. Moreover, Massive Health was able to show that by giving lightweight feedback to users of the healthiness of their food, they can actually motivate users to change their food choices. This incremental behavioral change is key.

Key takeaways from Andrew’s presentation:

- Optimize for engagement through great design.
- Analyze data and give the user just one thing to do differently in his day.
- Make metrics non-technical and transparent: is my food fit or fat?
- Data doesn’t need to be exact if it is easily captured and high volume

2. Peter Kuhar, CTO at [Azumio](#)

Azumio is a technology company with apps to measure sleep quality, heart rate and stress respectively, all of which are smartphone apps. By creating a persistent history of vitals, symptoms can be recognized early.

Such apps could not only help an individual become more aware about the state of their health, but such simple technologies could be used for in-home visits by caregivers to check how a person was doing.

3. Ron Gutman, CEO of [HealthTap](#)

HealthTap is an Interactive Health Network that connects people with thousands of North America's best physicians providing answers to health questions – anytime anywhere and for free.

Contradictory to their initial hypotheses, doctors actually loved to participate and give advice for free on the internet. The platform gave the doctors recognition, reputation and a channel of distribution. The ability for patients to thank the doctors also introduced a more human component in patient doctor relationships that seem to have been hampered by systemic and legal issues in healthcare today.

4. Scott Heiferman, CEO of [Meetup.com](#)

Meetup is a very popular platform that enables people to find or form groups based on common interests and actually meet in the real world.

Scott explained that people generally join groups for the benefit but stay for the community.

He emphasized how the internet gives people the opportunity to self organize and find creative solutions to their problems. He sees the narrative evolving from 'a story of me' to 'a story of we'. The dialogue left an open question of whether the unit of analysis should be the individual or the group in a social network.