QuantifiedSelf: empowering patients, are we getting there?

WAC, Katarzyna
QuantifiedSelf: empowering patients, are we getting there?

This is another post in our series Reflections Careum Congress 2014. Here, guest author Katarzyna Wac shares her thoughts on a focus of the Congress: empowering patients, i.e., understanding methods, tools and approaches enabling this empowerment, and current outcomes, advantages and disadvantages of such an attitude.

A patient shall not be just a passive ‘object’ of treatment by the healthcare system (as it is now) but, as we envision for the future – an active ‘actor’, which needs personalized guidance and support from the system. But how do we get there? The road is long and not always straight, but there exist some promising developments, which can help in here.

Chronic Disease Management

What is the most prevalent in a disease management is an assessment of health measures related to psychophysiological signs of disease like body temperature, respiration or heart rate, blood pressure, bleeding status or pain level and so on. This assessment lasts until the state of health is achieved for an acute illness like common cold or wound healing, or it can be required from the patient for months and years in case if he/she suffers from a chronic illness. Particularly, the chronic disease management requires an adequate assessment periods in order to understand how the current treatment is influencing the health state or the patient and what changes may be necessary in the future treatment. In majority, a chronic patient is instructed how and what to assess in between the visits in professional care, and for which cases to seek additional and/or urgent help. In practice – a chronically ill patient is left alone with his/her own illness “in between the visits”.

Technological Support

Its 14:03 on a lovely day in June 14, I have burned 1113 calories and walked 4859 steps so far today and now, while sitting, my pulse rate is 66. I have slept 7h 34 min last night, and my sleep score is 89%. How do I know it? I just wear a BASIS watch (http://www.mybasis.com/), which gives me this data without me asking (see Figure).
I am a QuantifiedSelf enthusiast; I have started to manage my own weight 15 years ago and have a long story of self-quantification supported firstly by a basic paper, pencil and photo (p²) method, and since 2010, by wearable devices for physical activity and pulse rate like BASIS. I have lost 15 kilograms since the beginning of my quantification journey. But not without major setbacks [1].

Today, I leverage BASIS to better understand my sleeping patterns. I have self-experimented with dinner times and alcohol intake before the sleep. I can say, thanks for BASIS data that definitely improved my sleep based on small modifications of my lifestyle choices. The choice was mine.

In fact, availability of pervasive, ubiquitous, technologies like BASIS propel self-monitoring of own health state and its self-management. There are many devices and apps supporting the user – a potential patient in monitoring and assessing his own health state and care needs. One can assess physical activity and mobility patterns, nutrition, posture, sleep quality, dreams, air quality, productivity, mood and emotional episodes, alcohol intake, smoking patterns, number and length of social interactions, quality of sex, current weather, money spend, books read, petrol usage, CO2 footage...And many more are upcoming! [2-5]

**Human factors**

The technology ‘push’ to potential end-users does not work, I can definitely see that. One of the core challenges is user acceptance – those of a patient and of a care practitioner. How the patients will manage the devices and app “in between the visits” and how practitioner will involve in the treatment decisions the data collected “in between the visits” via the quantifiedself approach? There are further factors influencing the answers for these questions: how difficult to use are these devices and apps? How attractive and “fancy” these are for a patient to feel good using them? How accurate are they? What kind of feedback they give to the patient? Where is the data stored and how the patient privacy assured? Who reimburses the costs? How practitioners’ workflow must change to accommodate these in a routine practice?

**My questions**
Imagine you are a patient (or you are practitioner guiding group of patients) and that need to monitor own health care and decide upon care needs. Would you be willing to accept the 'quantified self' approach? Why? Why not? What benefits do you see in self-assessment via wearable devices and apps? How about self-experimentation?

My pulse rate indicates 79, which means I am getting excited while looking forward to receive your feedback and comments. I am a QuantifiedSelf enthusiast, are you too by now?

What are your thoughts on the event? I am looking forward to your comments!

**References**


---

**Autor Katarzyna Wac**

Senior Scientist, Quality of Life technologies group leader, University of Geneva, Switzerland.

[LinkedIn](#)

---

Keywords: 2014, Forschung, behavioural change, chronic disease, chronic disease self-management support, Empowerment, health outcomes, healthcare, lifestyle, monitoring, Patient Empowerment, reflections Careum Congress, self management, self-care, treatment, Usability