

The Use of Big Data for Personalized & Safe Healthcare

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Newsletter 1
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UNIVERSITY OF TWENTE.

IGS
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Centre for eHealth & Wellbeing Research

Dear all,

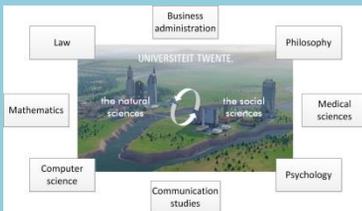
Our research project on the use of Big Data for personalized and safe care is well underway! We would hereby like to inform you about the progression and our future plans. We would also like to thank you all for your interest and involvement in the project and we hope to continue this cooperation in the future!

We aim to gain insight into the following questions

1. How to use data from large, complex datasets in an effective, efficient, secure & safe way? What factors are crucial for using and managing big data to support the growing needs for personalized healthcare ?
2. What associations do people have with the term big data? How do their mental models look like?
3. How to design real-time, accurate, persuasive and personalized feedback systems?

(Planned) Activities

We composed a multidisciplinary focus group and a multidisciplinary project group/work group.



The focus group shared their vision on the use of big data in a health setting, resulting in an overview of concerns that might arise when applying big data in a healthcare setting.

Because the medical field was not represented during the focus group discussion, we are currently setting up interviews among medical staff to gain insight into their views as well.

The next step will be to administer a survey to the general public to:

- Validate found associations;
- Extract general concepts;
- Determine the general public's attitude towards eHealth/big data applications in a health(care) setting and the assessment of their self-efficacy in dealing with such applications.

Also, we are currently analyzing social media and search engine queries in combination with a narrative network analysis methodology to improve our understanding of the general public's perceptions regarding the emerging value of big data in health contexts.



A) Word cloud (Coosto)



B) Network Analysis (Gephi)

After that we will apply the results by translating big data into personalized care applications. We will do this by using cognitive technology that is theory-driven and by performing log-data analysis. So far, we have found that log-data can provide valuable prompts for improving the system design to promote long-term user adherence and satisfaction.

NEWS - Speaker invitation & symposium:

- We are invited to present our research at the international Medicine X conference, in Sept. 2015, at Stanford University (CA, USA).
- We plan to organize a symposium on Big Data & Personalized, Persuasive Healthcare in 2016.

NEWS - Change in contact details:

Liseth Tjin-Kam-Jet – Siemons will be on maternity leave from the 19th of August 2015 till the 4th of January 2016. During this period, Floor Sieverink can be contacted for questions regarding the project (f.sieverink@utwente.nl; 06-28554510).