

CONFERENCE ABSTRACT

SIFT- Research of the patient flows and structures in health and social care services in three Finnish cities in 2009-2015

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In Finland, the structure of health and social services will be reformed in 2019. This means that the responsibility for providing public healthcare and social services will be assigned to 18 autonomous regions. Healthcare and social services will be brought together at all levels to form customer-oriented entities, and basic public services will be strengthened. Besides structural reforms, the steering and operating models in healthcare and social welfare will be thoroughly modernized. The aim is to achieve better services that are not only more customer-oriented, effective and cost-efficient than before but also better coordinated.

The integration of healthcare and social welfare services means that all services will be under the management of a single structure, or the county. The counties will be responsible for coordinating the services and forming effective service and care chains. All financing will also go through the county to service providers. The county additionally has the duty to ensure that public, private and third sector services within the scope of the clients' freedom of choice work together, information flows smoothly, and the services meet quality criteria.

SIFT is a research where we focus to on the heavy users of social and health services. We try to find out which services these heavy users and their families use, how often they use services, and what the typical service processes are like.

The purpose of SIFT research is to find out what, how and when different health and social services are used. How are different services linked together and what are the typical combinations? What is the level of health and social care integration before the big reform and where the focus of integrated care should be?

We use data analysis methods such as Markov chains, evolutionary algorithms, classification and regression trees to analyse our data. We use different analysis tools, for example R, Excel and Java. Data has been collected from the registers of the cities of Lohja, Karkkila and Vihti and from the register of the Hospital District of Helsinki and Uusimaa. Data contains all persons who have been clients in all following services: primary care, special health care and social services. Timeline of the data is from January 2009 to July 2015.

The first results show for example that the use of health services of family members of child protection's customers correlates with the child protection's customers' ICD10-codes. The

strongest correlation is with ICD10 F-class, where one visit of a family member increases the probability of the child protection customer's visit by 21, 1 %. Analogously the same effect occurs with Z-class, where the probability increases to 31, 4 %.

Our long-term target is to build a toolkit or an instrument to forecast persons' probability to become a heavy user of different social and health services. The toolkit is planned to be based on Excel-platform using VBA macros.

Keywords: reform; knowledge management; evaluation
