Recommendation 3:

Big data & data analytics

Inclusive well-being and health

Using '*big data and data analytics*' to meet the societal need '*Inclusive well-being and health*'

Actual solutions and services:

Big Data technologies will definitely open new opportunities and enable breakthroughs related to healthcare data analytics addressing different perspectives: (i) descriptive to answer what happened, (ii) diagnostic to answer the reason why it happened, (iii) predictive to understand what will happen and (iv) prescriptive to detect how we can make it happen.

There are already many examples for the application of big data analytics in health care up and running ranging from applications for asthma patients, treatments for cancer patients, rare diseases, to the personnel planning in emergency rooms.

SWOT Analysis	
Strengths	Weaknesses
• **Faster, better decision making.** • **Informed and often real time insights on issues of interest.** • **Development of new products and services.** • **Ever-narrower segmentation of customers and therefore much more precisely tailored products or services.**	• Using real-time insights requires a different way of working within organisations. • Data quality concerns. • Imperfect methodology issues – questionable quality of predictions.
Opportunities	Threats
• **Better simulation services for the Public Sector** • **Development of improved health care services** •	• Privacy concerns.

Inclusive well-being and health:

This broad category pertains to the pursuit of well-bring, provision of a primary health care services, realignment between work, personal and community life and a stable work-life balance across all age groups and gender. Some instances of this need include providing basic health care services and personalized services for disabled and physically impaired, child care, maintaining the quality of life (work-life balance, cultural and free time), and reducing the stark economic and social isolation of elderly people. 10 of our informants mentioned this as a priority need. Their comments and concerns embrace issues such as "more appropriate medical care", "improved access to primary health institutions", "social cohesion", and "lack of solidarity and rise of selflessness".

Big data and data analytics:

Big Data is a term for data sets with sizes and complexity beyond the ability of commonly used software tools to capture, curate, manage and process data within a tolerable elapsed time.

According to Gartner's definition, Big data is high volume, high velocity, and/or high variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation. That definition, which includes the 3Vs (Volume, Velocity, Variety) has been recently complemented to include also Value of data as well as Veracity, coining in this manner a 5V Big Data definition.

The term often refers simply to the use of Big Data Analytics to collect, organize and analyze large sets of data to discover hidden patterns, unknown correlations and other useful information.

*Data analytics are closely related with Big Data, as the advert of the latter propelled the rapid development of novel analytics methods, capable of handling bigger data loads and of providing more evidence-based results with less uncertainty due to the bigger data samples available.**

*Gartner Big data. http://www.gartner.com/it-glossary/big-data/. Accessed 13 July 2017.
Wikipedia (2017) Big data. https://en.wikipedia.org/wiki/Big_data. Accessed 13 July 2017.