Monitoring and evaluation of the pilot project  
“Reducing childhood obesity in Reggio Emilia”

Research description
The aim of this research is to monitor, evaluate, and advance a pilot project, developed within the wider European project “Co-creation of Service Innovations in Europe” (CoSIE). The CoSIE project promotes the co-creation of public services, and entails the active involvement of citizens in public service delivery by creating sustainable partnerships between local authorities and citizens (Voorberg, Bekkers, Tummers 2015). It can further be seen as the voluntary or involuntary involvement of public service users in any stage of the design, management, delivery, and/or evaluation of public services (Osborne, Radnor, Strokosch, 2016).

The project is executed through the creation of nine pilot sites in Europe using open data and innovative Information Communication Technology (ICT) services. The Italian pilot will be carried out in the city of Reggio Emilia, where the local health authority (LHA) will be responsible for creating services and Internet applications (apps) for the prevention of childhood obesity.

Theoretical framework:
The purpose of the pilot is to address one of the most serious health challenges of the 21st century according to the WHO: childhood obesity. Indeed, in Western countries, a phase of profound demographic and social transformation has substantially changed the structure and composition of the resident population (Bassi, Fabbri, 2017). In addition to its medical implications, childhood obesity represents a salient social issue. Being a consequence of obesity and metabolic disorders, it disproportionately affects the most deprived populations and some minorities. Childhood obesity is deeply connected to social and economic factors; obesity is indeed more common among children who come from socio-economically disadvantaged families. This explains why health inequalities are linked to social determinants like education, housing, and lifestyle. Moreover, health inequalities are strengthened by other factors including health care organization and access to healthy food; unhealthy behaviors reinforce these inequalities (WHO, 2014). As a result, childhood obesity is associated with a higher chance of obesity, premature death, and disability in adulthood (Broccoli et al 2016).

Childhood obesity is also related to the digitalization of health. In recent years, the proliferation of e-health technologies has fueled a fervent debate worthy of investigation. The evolution of ICT could radically transform the relationship between individuals and their health. Although the challenges are
numerous, the digitalization of health care offers valuable opportunities for improving public health outcomes. This new phase involves the participation of various actors who, using IT tools, build new communities founded on shared knowledge and experiences related to their condition or illness (Swan, 2009). The accessibility of new technologies gives greater autonomy to patients, who can now play an active role in the management of their illnesses. As described by the European Commission, mobile health may “support the changing role of patients from a passive to a more participative role, while enhancing their responsibility over their own health” (EU 2014, 5). Among these new technological tools, apps play a crucial role: they may affect the way that people understand various aspects of their health (Maturo, 2012). As shown by Lupton (2014), apps are also socio-cultural products located within pre-established circuits of discourse and meaning. Using these technological tools, it is possible to increase and improve doctor-patient interaction.

**Goals of the pilot**

In 2010, Reggio Emilia researchers estimated that 22% of children were overweight (Fabbri, Palomba 2010). These data are particularly troubling because they indicate that obesity is increasing rapidly among young people (Maturo, 2014: 156). Together with CUP 2000, the LHA of Reggio Emilia has developed a series of IT and organizational tools in order to offer counseling services to families and foster motivation to change, focusing on diet and lifestyle.

The pilot will apply the co-creation model to encourage the target population to achieve successful long-term results. Furthermore, community involvement in defining goals and determining best strategies for intervention has the potential to reduce inequalities in health and in health service access, using the potential offered by ICT in the e-care sphere (Moruzzi, 2005).

The outcome of the pilot project will be the co-creation of a reliable Internet app for promoting children’s healthy lifestyles. The app’s monitoring system will be linked with other health information and data. To enhance community participation in the program, users will define what it is truly useful for both parents and health operators. This app will amplify the voices of parents, children, and health care workers, empowering them to define together what is important in order to reduce the burden of obesity.

**Methodology of the research**

Before starting the empirical research, contextual and theoretical analysis will be conducted, including the study of documentation and publications concerning childhood obesity and projects
already implemented in the province of Reggio Emilia. The empirical phase of the project will follow a qualitative methodology. Focus groups of families and health professionals (e.g. pediatricians) will be established, especially in the initial phase. Semi-structured interviews with children, families, and health personnel will subsequently be conducted. The results will be used to evaluate and monitor the implementation of future co-creation policies and strategies.

The research aspires to build the capacity of local health services by increasing citizen and community participation in service design and implementation, as well as make obesity services more effective. The ultimate ambition of the pilot is to reduce childhood obesity in Reggio Emilia.

**Research plan activities**

The research phases are listed below:

A. **Theoretical framework:** More specifically, the first phase of study will cover grey literature on social determinants, obesity, and childhood in the Emilia-Romagna area. This portion will be analyzed using sociological concepts. Deep knowledge of the main theories surrounding the sociology of health is required. (expected duration: 1 months).

B. **Population identification:** The second phase will be devoted to identifying the target population and recruiting the app beneficiaries (patients/families/health care workers). (expected duration: 2 months).

C. **Empirical research:** The third phase will be dedicated to empirical research. Focus groups and interviews will be conducted to obtain feedback regarding the creation of the app. Deep knowledge of digital sociology is required. (expected duration: 6 months).

D. **Data analysis:** The fourth phase involves the analysis of qualitative data collected during the previous phases. The data will be subsequently analyzed to implement the creation of the app. (expected duration: 2 months).

E. **Dissemination:** In the final phase the outcomes will be disseminated through research report, scientific articles, and seminars. (expected duration: 1 months).

Fluency in written and oral English is required as the project is carried out in conjunction with several foreign universities. The candidate will be able to actively participate in international meetings and should be comfortable with public speaking in international context.

**Timing project: 12 months**
References:

Moruzzi M. (a cura di) (2005), Reti del nuovo welfare. La sfida dell’e-care, FrancoAngeli, Milano.