# Cizitens' literacy and healthcare capacity building in Italy





TYPE STATUS

Implementation completed

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ITALY • NATION-WIDE

# PROBLEM & OBJECTIVE

PROBLEM The rapid advancements in Personalised Medicine approaches and technologies emphasize the need for education strategies addressing citizens' literacy, and also the continued improvement of healthcare professionals' knowledge in this field. Non adequate literacy impedes the adoption of these advancements into healthcare system

OBJECTIVE Implementation of innovative actions for the literacy of healthcare professionals and citizens on omics sciences. Development of education strategies to increase citizens' literacy and strengthen healthcare professionals' capacity building, that could led to their engagement in all levels of decision making

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#### **KEY COMPONENTS / STEPS**

- The 2010-2012 National Prevention Plan, published by the Italian Ministry of Health and the regions, aimed at defining the best instruments for the promotion of genome-based knowledge among health professionals and citizens.
- The National Plan for Public Health Genomics (NP-PHG), published in 2013 by the Ministry of Health, included two major pillars: education and capacity building of physicians; and the promotion of basic genomic health literacy for general population
- For the implementation of NP-PHG, the Italian Centre for Disease Prevention and Control (CCM) financed two different lines of projects, which aimed to: 1) institute accredited training courses, workshops and seminars addressed to general practitioners, public health specialists, oncologists, gynecologists and neurologist; and 2) to evaluate training courses on PHG in postgraduate medical residency programs of Public Health and/or Community medicine in Italy.
- National Plan for Innovation of the Health System based on omics sciences, was published in 2017 and aimed to increase the awareness of all stakeholders on the innovation of omics sciences.

#### **KEY CONTEXTUAL FACTORS**

- The Italian Centre for Disease Prevention and Control (CCM) acts as a technical advisor for all the genome related technologies with a potential health related application.
- For the implementation of NP-PHG, CCM funded a project that started in 2015 and aimed at the development of a Distance learning course in Italian language, entitled "Practical Genetics and Genomics", directed to general practitioners, aiming to train them in the appropriate use of omics technologies.
- For the implementation of the Italian National Plan for Innovation of the Health System based on omics sciences, CCM
  beside updating the past educational activity on genomics for physicians and opened the distance course also to biologists.
- For the implementation of the Italian National Plan for Innovation of the Health System based on omics sciences, a survey
  with the collaboration of the Cittadinanzaattiva was conducted, aiming to evaluate Italian citizens' knowledge on the main
  topics related to genomics in public health (DTC-GT, oncogenomics, pharmacogenomics, etc).

#### MAIN IMPACTS / ADDED VALUE

- Understanding citizens' level of literacy related to omics sciences is necessary for the planning and development of
  educational strategies in the general population.
- Educational interventions can increase citizens' awareness and comprehension of genetic and genomic information and genetic tests, enabling the citizens to make appropriate and well-informed health decisions, leading to a decrease number of unnecessary medical visits and procedures.
- Add a bullet on the number of trainings provided/level of citizen participation how is the public informed about the training
- Genetic/genomic education programs among healthcare professionals contribute to improve the appropriate use of the genomic knowledge and genomic technologies.
- A previous distance learning course on genomic and genetic tests for healthcare professionals in Italy, available from 2013 to 2015, showed a significant improvement in the level of knowledge at the post-test evaluation.

#### **LESSONS LEARNED**

- Involvement of all stakeholders at all levels in decision making and organizational strategies is crucial for an appropriate implementation of genomics and Personalized Medicine in healthcare
- Professional education and definition of a core curriculum of "basic" skills for trainers and medical prescribers of genetic tests is essential to ensure optimal translation to healthcare delivery of research
- Considering the Italian experience, distance learning courses in genetics/genomics are an effective, low-cost, satisfactory
  and clinically applicable method to improve physician's knowledge.
- The effective implementation of genomics in healthcare requires the engagement of skilled healthcare professionals and well-informed citizens in grasping the potential benefits and tackling the issues of a personalised healthcare

### **REFERENCES & DOCUMENTATION**

- Intesa Stato Regioni
- Policy of PHG in Italy
- 2017 Italian National Plan
- Distance learning course Italy 2015
- Citizens' Attitudes, Knowledge, and Educational Needs in the Field of Omics Sciences
- Genetics and Genomics: The Effectiveness of an Italian Distance Learning Training Course

