

Ferri F., Rafanelli M. Maceratini R., Sindoni G., **An object oriented decision support system for the planning of health resource allocation**, Computer methods and programs in biomedicine, Elsevier - London, UK, 1995.

Abstract: The health resource allocation problem is discussed in this paper. An object-oriented system, which consists of two parts is proposed and its implemented prototype is illustrated. The first part consists of a Geographical Information System which is able to acquire and store both geographical information regarding the territory under investigation and the socio-epidemiological information and the resource distribution in that moment on the same territory. The second part refers to the strategies and the relative algorithms carried out (using a Decision Support System) to obtain the best solution (allocation of new resources optimizing the cost/benefit ratio) after that the user has fixed a goal (e.g., the decrease of the incidence of a given disease) and has defined some constraints (e.g., a fixed budget, a given set of available resources, etc.). The object-oriented database stores different scenarios, depending on the different goals and constraints defined in input. A user friendly interface was also implemented.