01.6 Health Care and Quality of Life

With regard to Health care, the application of the new information and telecommunications technologies is principally concerned with two types of solution, as well as with technological platforms. On the one hand, these technologies are applied to processes of prevention, diagnosis, patient treatment and follow-up, in addition to providing citizens and health care professionals with access to information about "Health" and the management of their services (surgeries, reservation of visits, etc.). On the other hand, they are concerned with the technical and technological platforms used by health care workers at various levels to perform telediagnosis and tele-examination.

Some important aspects of this area are:

1. Civic awareness of quality of life and health, seen as a valuable indicator of a country.
2. The particular importance of the health care sector in Catalonia.
3. The economic importance of the pharmaceutical and chemical industry in Catalonia, as well as of the health care sector in general (medical and health care research laboratories and technological centres, etc.)
4. The influential research work conducted by laboratories and technological centres associated with the health care sector.
5. The integration of the data relating to the health care sector as a decisive factor.
6. The prospect of strengthening the chain that interrelates the various health agents and technology, with a view to improving procedures and services.

With these points in mind, the following indicators have been selected to measure the attainment of the proposed objectives:

01.6.1 **Degree of computerisation of the professional health workers,** *both in the free practice of their profession and in surgeries within the health care system.*

01.6.2 **Degree of communication and integration of the various health agents** *within an integrated service. This indicator will measure intercommunication between professionals and their centres and pharmacies, the health care service and insurance companies in a given country.*
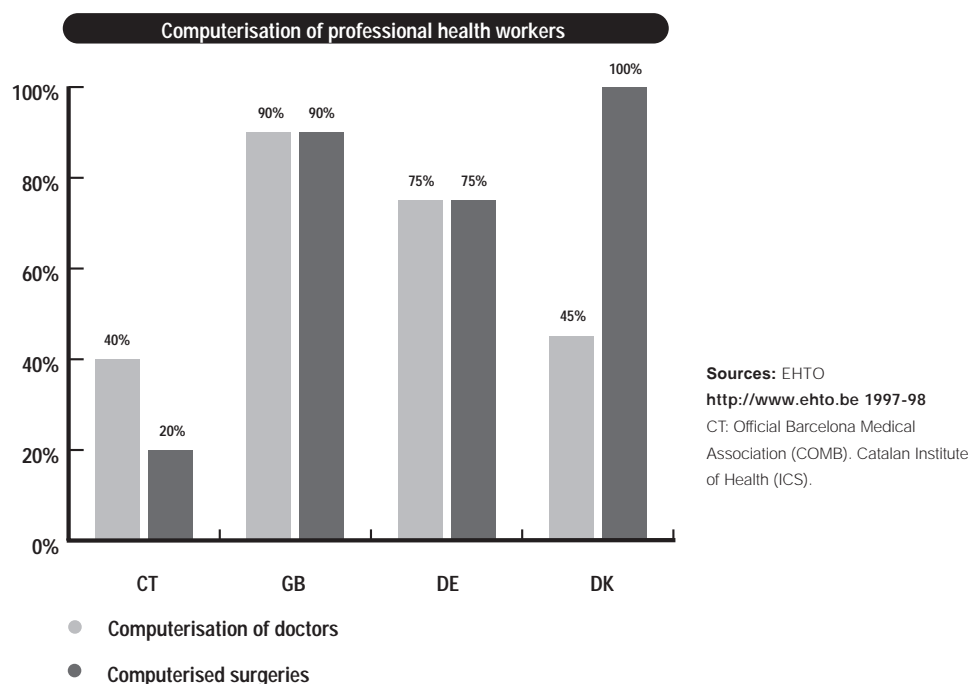
01.6.1 Degree of computerisation of the professional health workers

This indicator reflects the use of computer systems (computers, Internet, surgery management applications, etc.) by professionals in the free exercise of their profession, and also the degree of computerisation (computer, local area network, etc.) of the offices of the public health service hospitals.

There is currently a programme to computerise the consultation rooms of public hospitals, through which it is intended to introduce computers and surgery management systems. At present, 24% of the doctors that belong to the Official Barcelona Medical Association (COMB) use the Internet, thanks to the connection offered to them by the association itself.

The graph below shows connection data relating to doctors in the province of Barcelona. Although the data do not cover all of Catalonia, the figures may be considered to be representative, since the province of Barcelona accounts for 21,000 associates of the total 25,000 in Catalonia.

The figure of 20% shown by the graph only represents the connections that the professionals have at home, but if the present connection opportunity for doctors through the Catalan Health Service (SCS) and the Network of Hospitals for Use within the Public Health Service (XUPH) is included, this figure rises to approximately 50%.

Computerisation of professional health workers

Sources: EHTO
http://www.ehto.be 1997-98
CT: Official Barcelona Medical
Association (COMB). Catalan Institute
of Health (ICS).

- Computerisation of doctors
- Computerised surgeries

With respect to electronic access to the public health system for users, in Catalonia the introduction of the individual magnetic identification card covers 90% of the population, a level that is comparable with the other countries. Despite this, at present, the sole function of the health card is to identify the patient for administrative purposes. The type of identification card varies from country to country, ranging from the simple identification model to smarter cards that incorporate a chip.

01.6.2 Degree of communication and integration of the various health agents

This indicator seeks to show the degree of computerisation and the use of electronic data transmission systems by the agents in the health care chain. The degree of computerisation of the different agents varies from country to country.

Their intercommunication also varies from country to country within Europe. Some exchange data on diskettes or batch files, while others transfer electronic data (EDI) integrating the entire health care chain: doctors and hospital centres, pharmacies, and the corresponding insurance companies.

Countries such as Denmark and Canada are already gradually introducing EDI into the health sector, while others such as the United Kingdom are setting up pilot projects among all the health agents (primary and secondary health care, pharmacies, etc.). The following graph only shows the degree of **computerisation of pharmacies** in various countries.

Pharmacies that are computerised and/or have EDI

Sources: EHTO
http://www.ehto.be 1997-98