

# Title: Computer-Based Patient Records

- Agency: Center for Technology Assessment at the Swiss Science and Technology Council Inselgasse 1 3003 Bern, Switzerland; tel:+41 31 322 9963, fax:+41 31 323 3659, ta@swr.admin.ch www.ta-swiss.ch
- **Reference:** TA Study «Computerbasierte Patientendossiers. Chancen und Risiken», TA-36/2000 Short version «The patient in the data network – advantages and risks of computer-based patient records» TA-36A/2000, 8 p., available in English, French and German); www.ta-swiss.ch

## Aim:

Computer-based patient records are electronically managed health records. In Switzerland they are being used in certain cases as they are more easily managed than bulky paper files and more easily available and accessible for analyses, eg, for scientific purposes, preventive medicine programs, or insurance companies. Furthermore, computer-based patient records can facilitate the use of telemedicine. However, potential risks, principally concerning data protection and IT security, must also be considered when introducing the system. This report gives detailed information on the advantages and risks of computer-based patient records.

### **Results and Conclusions:**

Computer-based patient records are part of the future in healthcare, medicine, and medical information technology. Conflicts of interests will appear when computer-based patient records replace written medical records. It will be necessary, eg,

- to ensure greater efficiency in medical treatment, but not at the patient's expense,
- to have more information generally accessible, eg, for epidemiological purposes, without comprising data protection,
- to ensure more transparency in healthcare procedures without excessive control of those directly involved,
- to improve quality assurance without limiting the scope of activity of medical staff, and
- to guarantee competition for small and medium-sized manufacturers of medical software while ensuring reliable, internationally compatible systems.

#### **Recommendations:**

- Existing regulations governing data protection and security are general as regards computer-based patient records. Hence, it would be useful to have guidelines for handling personal data in the medical sector, help with regard to the application of electronic systems, and recommendations for those responsible in the healthcare sector.
- All those directly affected by computer-based patient records should have input on design and introduction procedures. This would particularly include those who use computer-based patient records and representatives of patient organizations.
- Patients should play an active role in deciding which data may be accessible to third parties and which data are to be kept confidential.
- Computer-based patient record systems in Switzerland have mainly come about through individual initiative. In the next few years, increased coordination and planning will be called for, involving specialists from a broad range of disciplines and those directly involved, eg, representatives of patient and professional organizations.

(continued next page)

Written by Walter Grossenbacher-Mansuy, TA Center, Switzerland

International Network of Agencies for Health Technology Assessment



# Title: Computer-Based Patient Records

Agency: Center for Technology Assessment at the Swiss Science and Technology Council Inselgasse 1 3003 Bern, Switzerland; tel:+41 31 322 9963, fax:+41 31 323 3659, ta@swr.admin.ch

www.ta-swiss.ch

**Reference:** TA Study «Computerbasierte Patientendossiers. Chancen und Risiken», TA-36/2000 Short version «The patient in the data network – advantages and risks of computer-based patient records» TA-36A/2000, 8 p., available in English, French and German); www.ta-swiss.ch

### Methods:

The international (scientific) literature was studied extensively, and over 20 experts were interviewed in Switzerland. The individuals and institutions considered were mainly doctors, medical IT specialists, lawyers, and others employed in the healthcare system.

#### Further research/reviews required:

It is recommended to support further research on computer-based patient records as regards rights, economic aspects, and the provision of health care.

Written by Walter Grossenbacher-Mansuy, TA Center, Switzerland