Privacy and Data Protection in Medicine

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Privacy as an elementary individual right is legally based in paragraph 203 of the German penal code (3).

Misuse of informations relating to the private life or the business of a person known by a physician practising his profession is punished by imprisonment up to one year or by fine. Similar professional groups are also cited in paragraph 203. Certainly it is not by chance that medical doctors are noted in the first place. In the precomputer - era this was the only legal base concerning privacy.

Every young doctor entering a clinic was informed about some basic rules already in former times: No information about a patient should be given by phone: He may be asked for the state of disease of the mother named X by a person who is not the daughter but a curious neighbour.

There are plenty of data gathered for every patient in a modern clinic. Medical records at the end of a treatment are still nowadays remoted into a record office by systems varying from clinic to clinic. E.g. in systems where records are arranged in alphabetic order the char-women has no difficulty to look in a given moment for the diagnosis of some known person.

Both examples were and are still typical as violations of medical professional discretion. They represent hurts of single persons' privacy. No curious person would be able to take away all or big parts of the tons of paper of a medical record office.

This situation has completely changed with the introduction of computers into medical services. Taking into account the growing mass of data in modern clinics, e.g. by investigations in different laboratories, the handling of data by computers has become a necessity. But which is the cause for these large discussions about medical data banks managed by the aid of computers which generally only store a
part of medical informations about patients. The old record offices are persisting.

A first cause of this apprehension in public life and the development of laws is the facilitated handling of masses of data, its transfer and the possibilities of evaluations by the computer. In this situation the consciousness of the population and the legal authorities have changed.

Since the 28th April 1978 a bavarian data protection law exists which is - like in other German Länder - closely related to the general German law of the protection of person - related data (2). In this new law reference is made to a lot of technical details of data handling by computers: control of entering, delivery, storage, use, access, transfer, ordering, organization of data etc. in computer systems.

This workshop deals with cryptographical methods supporting protection of data. I feel the necessity to add to your technical devices of Cryptography some remarks of quite another point of view of the problem. There is a big lack of legal indications for the different procedures of data protection. In reverse by this legal uncertainty in many fields medical research is obstructed by the new laws of data protection, especially in epidemiology. In the same time I'll try to turn out some problems calling for technical solutions deriving from these considerations.

Lawyers in a conference about "Privacy-Data Bank-Data Protection" organized by the Society for Legal and Administration Informatics held in Bad Homburg v.d.H in February 1982 took reference to the classical relation physician to patient. In a modern university clinic patients are often presented to very different clinical offices of diagnosis and/or therapy and in the same time to different physicians. Generally a 1 to n relationship with perhaps different levels of privacy exists. What are the consequences of data handling by a computer?

In order to highlight the arising difficulties I will take the example of the development of our Clinical Information System in Erlangen where our Medical Faculty is equiped by a computer of the type SIEMENS 7.541 which is installed in the Institute of Medical Documentation and Statistics. In a first stage we are about to implement a cancer registry including identification, diagnosis, histological characterization of the tumour and some data of follow-up. There are patients only documented by one clinic, others treated and documented by different clinics.