ABSTRACT

This presentation will report some reflections about "MEDICAL COMPUTING LAW."
The experience with practice in the field of computer application in medical care brought many problems with the law: E.G. privacy, data protection and data security problems, questions of contracting in hardware and software, use of computers in medicine, liability for medical computer decision making, etc.

All these problems and questions call for a new view of law in the computer field, especially in the medical sector. So we decided to describe MEDICAL COMPUTING LAW as an interdisciplinary legal science with the function of integration of legal concepts.

INTRODUCTION

When scientists wish to describe a new view of problems or a new way to look at these special problems and questions they have to create a new science often.

But, Computing Law is not a new science rather it is the application of law in the computer field. We know of the problems with computers and the law for more than 20 years. However, special questions in the medical sector demand additional analysis.

The Medical computer application gives another range of problems. We have medical information pools where you can get with one single push on the keyboard more information about one person than a private detective could collect in a year working full time.

This has given a strong rationale for data protection, for data security, for PRIVACY.

For example:

I. CORRECTION OF INCORRECT MEDICAL DATA

The patient file is information from the doctor about his patient. Question: What to do when there is incorrect information in some part of the patient record?

Let us look at three types of information in the same patient file:

1. Last operation: Appendectomy
2. Blood pressure: 190/110 mm/Hg Feb 1, 82
   - to correct
   - to block
   - to delete
3. Diagnosis: Schizophrenia

Now the patient claims: (1) I have no schizophrenia, I can prove it with a medical certificate from another psychiatrist. (2) The blood pressure is normally 120/80 mm/Hg. The high reading is either wrong or a freak. (3) Last operation: cholecystectomy, not appendectomy.

What to do?

Let me begin with the first example. This is simple. When the information has an objective character it is called a fact (In German: Tatbestand). The change is no problem, you correct the incorrect data on the file.

Second example: It can be a test error to have different results at the same time, or it is also possible there is a change a few moments. These are two possibilities. It is also possible that there is a high pressure when the young female nurse works and no high pressure when the old male nurse does the same. You have to know all of the situations and you have to do more blood pressure monitoring. Both results can be right, both can be wrong or one can be wrong and the other right. But the question is how to decide? You cannot repeat a situation, still you have to measure a few times. So it is very complicated to change such a data. Such data are a different type of fact that is a fact with many explanations.

Third example: Now, which of the opinions is the right diagnosis? This is an evaluation not a fact. Or is it a fact is this physician's opinion.

In the German law we have this principle as part of the fundamental data protection rights. (1) Data protection rights under the German law are - to correct - to delete - to block

Personal data have to be corrected by law, when they are incorrect. This correction has to be made officially. Data are incorrect when the information concerning the affected person is not
the same as the reality. But it is impossible to correct value judgements. Value judgements are usually statements of physicians' opinion which are based on professional training. A value judgement or an evaluation can be regarded from different point of views, it can be accepted or not, but cannot be "corrected." Is a diagnosis a "Fact" or an "Evaluation?" This is very hard to decide in medicine it is an objective fact and not a value judgement, or is it?

Let's return to the examples.
The patient has the right to correct the information in each example:
In the first there is no problem. It is clearly wrong.
The second is a "borderline case" (but not the "borderline" in the psychiatrist meaning!) You cannot change the entry, so the right to correct is insufficient. However, you also have a right to non-utilization of this information, in other words the data is blocked. Blocking and deletion of data is required when the patient cancels the agreement. There is no "automatic" right to keep data stored, particularly if it is not known to be correct under the Data Protection Law.

(3): "Data of health, crimes, infringements, religion or politics shall be deleted when they cannot be proved correctly by the storing place!" The liability for correctness is on the storing place.
The patient could claim compensation if the result of the incorrect blood pressure reading is the cause of an insurance premium increase.
In the third example with the diagnosis: Schizophrenia, one psychiatrist says yes, the other no. What is right or who has the better authority? Which solution is correct?
If a diagnosis is a fact there is the right to change the diagnosis, to correct. If it is a value judgement, an evaluation, then there is no such right. However, the storing place must prove the correctness of the data.
In practice the diagnosis is a fact, a description than an evaluation, equally the diagnosis is often the decisive judging. Therefore the data protection law should apply.
With the MEDICAL COMPUTING LAW - in a new way of thinking - you are the owner of your personal information as patient. The data are part of the personality, so you have to decide about your own personality and this is correct even for diagnosis. In stalemate situation nobody can say the patient has "schizophrenia" if there exists also another diagnosis.

II. FUNDAMENTAL ISSUES OF MEDICAL COMPUTING LAW

No. (1): Basic Computer Law
The Basic Computer Law includes the fundamental considerations which give the possibility of help to answer the new questions between Computer Science, soft- and hardware application, jurisprudence and the medical science.

No. (2): Documentation Law
Just in the medical field it is very important to have a good documentation with a satisfactory information retrieval. For this we need certain rules: who has to store?, who is responsible?, which rights has the storing place?

No. (3): Computer Criminal Code
In the medical part we can see much criminal facts, e.g. physical injury (tests with patients), violation of the patient medical secret. Changing of data files without permission, theft of information, etc.

No. (4): Civil Liability
Liability for wrong patient treatment, caused by computer information. Questions of contracts for hard- and software, offer and acceptance, what is being purchased?

No. (5): Medical Information
The question of ownership about information in the data file: is information recorded on the file patient or doctor's information? Which connection we have to realize in the Privacy and data protection question? Privacy and data protection are part of the information right.

No. (6): International Law
Also we have to check the international implications and relations between the different states as well.

No. (7): Transfer of Data
Last not least there is to review the international relationships and the national situation. How the medical records can be connected, what is the advantage, what is the disadvantage?

No. (8): Medical Ethics
The principle of liberty for the individual has an ethical basis. So the patient has a right of information, data protection and this right of information realizes "practical"ethics (praktizier-te Ethik!). This is important especially for the medical science.

All these rights are new in this "computer" connection, the information quality has to be regulated, the "electronic" information should be a help for the humanity not a disaster.
Therefore I would also say: data protection and information right is protection for the individual against all others.
These and other issues emphasize the need for a coherent Doctrine of Computer Law.

CONCLUSION
The review of these topics can only be a beginning, a start for discussion of MEDICAL COMPUTING
LAW. Brainstorming is needed for a better understanding of the relations between medicine, computer science and law. All three topics together should be a help for patients, physicians and in the cooperation for the patients interest. (4)

In a free society all information about a person should be available to that person. Consequently we should have a "RIGHT OF INFORMATION." This is more than only a "look in the file." Everyone has the right to be informed in an extensive way. The person is the master about himself.

Under the idea of MEDICAL COMPUTING LAW, especially Privacy and data protection - the physician is forced to consider his relations to the patient, to think about his work and the ethical implications of his service. Medical computing law, medical documentation and electronic data processing provide the integration necessary for a socially accepted Medical Computer Science.

REFERENCES


(4): A fundamental view about ethics in medicine, especially in application of computers, is developed in "Arztmedizinische Ethik - Datenschutz", in Datenschutz und Datenschichtung 1981, S. 246-250, from B. Beier; see also Lutterbeck, B., Persönlichkeitssentaltung in der industriellen Demokratie-Wirkungen der Informationstechnologie auf die Arbeits- und Lebenswelt" Tagungsband von der Jahrestagung des Deutschen Vereinigung für Datenschutz, Muchen-Wien, 1980, S. 111 - 142 (112 und 123ff.).