



## AEMH Statement on

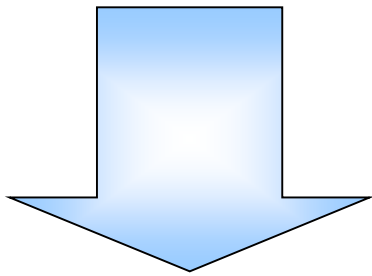
### MEDICAL RECORDS and ELECTRONIC MEDICAL RECORDS (EMR)

This statement is intended for professionals in Europe, who develop medical records and *EMR* systems. The purpose of the statement is that implementation of electronic patient records accommodate both patient and health-care requirements.

#### INTRODUCTION

Patient records fulfil many purposes. The foremost is documenting and supporting that patients receive correct and safe health care. However, they are also important for monitoring and developing healthcare activities. Documentation is also required in the event of adverse health care events or near misses due to medical errors. Documentation facilitates investigation of what happened to ensure that health care workers gain knowledge and can avoid similar events in the future.

The rapid development of information technology in health care has contributed to the development of new ways of working. EMRs have not only increased the availability of information for health-care providers in - and between the varying parts of - the health care system compared to paper-based medical records. In recent years, patients in some European countries (e.g. Scandinavian countries) have had the opportunity, to varying degrees based on varying design and security solutions, to access parts or all of their own medical records via the Internet. There are differences between European countries, and sometimes between different regions of one country, with the legislation governing the content of the medical records reflecting both similarities and differences. Implementation of electronic medical records should comply with national legislation. Healthcare professionals welcome the fact that patients will be able to access information in their medical records for the purpose of gaining greater control over and responsibility for their health. This eases e.g. monitoring of care processes, scheduling of appointments, checking of medication lists and following the results of laboratory tests. However, the medical record is also one of the physician's most important tools. The medical profession has wide-ranging experience of the introduction of IT systems in health care. Consequently, the rapid development of EMRs has raised both hopes of greater stringency and structure but also fears that the content can be affected in such a manner that it will become less relevant for medical doctors, thus more difficult to use as a professional medical tool.



### **PATIENT PERSPECTIVE**

Empowerment and control over their own health and their relationship with the healthcare providers

Correct information is available only where and when it is needed in the healthcare provision

The information must be comprehensible



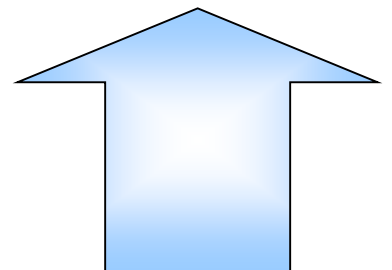
### **PHYSICIAN'S PERSPECTIVE**

The medical record is a tool. Easy access to the right information enables safe care and follow-up, and enhances the care process

IT systems must not completely replace personal meetings but shall instead be complementary

A better-informed patient improves the quality of the patient-physician encounter

Information to the patient must be structured or disclosed in such a way that it cannot harm the patient. This applies for instance to unclear/ ambiguous terminology, unsigned cancer diagnosis or psychiatric assessments.



## INTEGRITY

The rapid development of IT systems and social media on the Internet has changed society's perception of privacy. There is a very wide range of opinions regarding the right to privacy with regards to IT systems and what is exposed on the Internet. Furthermore, nations' intelligence gathering through the surveillance of Internet traffic has revealed IT security weaknesses.

AEMH states that:

- The implementation and design of *EMRs* should reflect the fact that individuals have varying requirements with regard to personal privacy.
- The implementation of national systems requires particularly high standards governing access authorisation to EMR content.
- Patients who choose to refrain from *EMRs* must have the same right to safe care.
- The risk that related parties could obtain undue access to a patient's information from an *EMR* or from a paper-based medical record and that this can cause e.g. domestic violence must be addressed.

## ACCESSIBILITY

Investments in technological solutions to give patients the opportunity to access their medical records electronically can give benefits for more resourceful individuals. Factors related to for example age, gender, socio-economic status, education, language, district of residence or homelessness can contribute to new inequalities with respect to the right to information.

AEMH states that:

- The implementation of *EMRs* and other patient-centred IT systems should address issues of support for approaches that might compensate for this type of inequality.

## SECURITY

Lack of IT security can harm the patient and the health care system. This can e.g. occur if the IT system's hardware or software is damaged, if information is lost or corrupted, or becomes available to unauthorised persons. In conjunction with the introduction of new IT systems and *EMRs*, shortcomings in the new or existing IT systems' security and firewalls can arise. Insecure systems that risk hacking and deficiencies in confidentiality endanger public confidence in the health-care system.

AEMH states that:

- Health-care systems' IT systems must have a high level of security and increased accessibility must not lead to security breaches.

- It should not be possible for data to be misrepresented or lost.
- Data must be inaccessible to unauthorised access.
- The patient should be able to control where the information is made available without this implying that the health-care services have less opportunity for follow-up and develop future health care provision.

## TECHNICAL INFRASTRUCTURE

The IT systems must be robust and reliable since malfunctioning has a significant impact on patient safety and the working environment.

AEMH states that:

- The data in the medical records must be available when required for the right patient, in the right quantity, be presented in the right manner and adapted to the situation. This applies even when the patient reads his/her *EMR*.
- Access to the patient's medical records should be simple for those who are authorised, with the goal of approaching *single sign on* (one login to multiple systems).
- The systems must be of such a structure that they in the long term are time saving.

## CONTENT OF THE MEDICAL RECORDS

The medical record is one of the medical profession's most important tools. Medical terminology changes continuously and is developed specifically for describing the patient's medical condition and care requirements accurately. The standardisation of search words and terms makes it possible to present the information in a structured manner and to automatise the transfer of information to data registries. Rapid changes in language and terms can jeopardise patient safety. When implementing *EMRs*, requirements before the disclosure of the record's contents should not be lowered, otherwise patients or relatives might be at risk.

AEMH states that:

- The content should be standardised using keywords and terms approved by the individual specialties in each country.
- Prospective users should participate in the development of new systems.
- The IT systems should have a structure that minimises the duplication of documentation. For routine cases, the documentation must be simple and time-saving, thus freeing resources.
- Demands for documentation must be weighed against the fact that a greater amount of information may hamper access to vital information.

- In the development of IT systems the content must be steered by health-care requirements and not e.g. be primarily submitted to economic governance or compensation systems.
- When implementing *EMRs* it is important to ensure that the requirements regarding layman's use of language in patients' medical records must not compromise patient safety.
- The structure of and access to *EMRs* must not endanger the patient or third party.

## TRAINING AND IMPLEMENTATION

When new IT systems are to be introduced, those responsible should take into particular account the fact that the systems have such functionality and performance that they are compatible with existing IT networks and work procedures in health care systems at the time of implementation.

AEMH states that:

- Activities and work procedures must be adapted to the new IT systems prior to implementation.
- It must be simple to systematically report deviations from the IT systems so that those responsible for maintenance and development of the systems can address deficiencies.
- Before and after the implementation, users must continually be given such training and support in order for systems can be used with optimal patient safety.
- After implementation systems must be managed, evaluated and optimised for usability in the intended work procedures and usability must be further enhanced.