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At the CPME Board Meeting, in London, United Kingdom, on 25 October 2008, CPME adopted the following document: "E-Health Paper" (referring to CPME 2008/180 Final EN)

# **E-HEALTH Paper**

#### Cross-border patient mobility and cross-border electronic prescription

In a world, where travelling is on the rise, cross-border electronic prescription is a crucial topic. This is especially so when the patient needs a refill of his/her medication, when medication is lost or when therapeutic re-adjustments need to be made due to changes in the patient's well-being.

E-prescription is given special attention to in the Commission's proposal for a directive on the application of patients' rights in cross-border health care. As mentioned in Article 14 of the proposed directive, the Commission plans to design a Community template for e-prescription. It is of utmost importance that physicians are involved in the elaboration of this template. Furthermore, in order to ensure practicability, user-friendliness and acceptance among patients and physicians, this prescription template should be elaborated on the basis of templates currently in use in Europe.

Measures taken by the European Commission to support the interoperability of electronic prescriptions can only relate to verification procedures with regards to the patient data, the verification of the authorisation of the prescribing doctor and the verification of the authenticity of the prescription. The measures taken must be sufficient to ensure that data can be verified via a connection to the domestic health care data server. Audit trails (e.g. logbooks or protocols) need to be in place in order to track down verification procedures on the domestic health care server.

Furthermore, the verification procedure must take place in three steps:

- 1.) verification of the patient data
- 2.) verification of the authorisation of the prescribing doctor and the dispensing health professional
- 3.) Verification of the authenticity of the prescription.

Technical procedures should be put into place in order to guarantee that only after successful completion of steps 1 and 2, the content of the prescription, i.e. the prescribed product, should be accessible to the health professional authorised to read the prescription. The dispensing of the product to the patient should be conditional on successful completion of all three steps of the procedure.



It would be useful if e-prescriptions could be stored on health cards, e.g. like the e-card in Austria. Moreover, e-prescriptions should be primarily used for prescriptions needed by patients with chronic diseases (e.g. insulin for diabetic patients etc.). It would be the patient's responsibility to have an updated electronic prescription when travelling abroad. E-prescriptions for chronic diseases, which are stored on a health card, should be valid for a maximum of one year.

Since cross-border mobility of patients is on the rise, it is becoming increasingly important that certain basic data of patients are available in an interoperable format. For example, data like vaccination status, allergies and information on medication incompatibility of a patient need to be available in an electronic and interoperable format.

Technical feasibility of such European-wide valid information depends on future e-health technology, which might be either card based or server based. In any case, the security measures as mentioned in CPME 2006/132 FINAL need to be adhered to. In addition, the costs for constant updates have to be taken into account in such a project.

One question that still remains open, is who is allowed to enter data, who decides and who takes on responsibility for the entered data. Basic guidelines need to be elaborated, taking into account the respective data protection laws of the individual countries as well as the recommendation of the Article 29 Working Party<sup>1</sup> and the CPME reaction to it CPME paper 2007-116.

## Telemedicine and future applications of e-health

Up till now the development within e-health has mainly been driven by economical and technological interests. The European commission initiative on Telemedicine and innovative ICT Tools for chronic disease management states: 'Europe is facing the challenge of delivering quality healthcare to all citizens, at an affordable cost. The increasing demand by citizens for best quality healthcare, the costs of managing chronic diseases and the need for prolonged medical care for ageing society are major factors behind this challenge'. The initiative shall also stimulate the technological development and thus create an e-health market for European industry.

Hence, it is most likely that the development of future applications of e-health will continue to be technological and market driven. Health care for the ageing population and self-management of chronic diseases will in the near future become a huge market for health care delivery, and will probably be the main area for future applications of e-health. However, the development should not be driven mainly by the industry. This is important in order to secure that patients get the best possible health care and that the medical profession and science develops in a direction which supports this goal.

Furthermore, with regards to the current communication on telemedicine it is essential to ensure that the voice of physicians is taken into account. Physicians are vital to the development of telemedicine, its implementation and use. In developing telemedicine applications, the guidelines for data protection and data security as pointed out by the

<sup>&</sup>lt;sup>1</sup>in its Working Document on the processing of personal data relating to health in electronic health records (EHR), 15 February 2007, WP 131 15 February 2007, WP 131

Article 29 working party<sup>2</sup> and in CPME's policy on electronic health records (CPME 2006/132 Final) need to be adhered to.

CPME very much welcomes telemedicine and as with other e-health applications, first and foremost, telemedicine needs to support and simplify the physician's work. Using telemedicine could be one way to assure better access to healthcare, for example in remote areas.

Telemedicine and e-health will in the future become an integrated part of our life, both as individuals and as physicians, and will have consequences for the relationship between:

## 1. the patient and the doctor

E-health must support the cornerstones of the physician-patient relationship, which are the face-to-face-contact and confidentiality but will also sometimes be a substitute that can assure more patients access to healthcare.

2. the patient and the health institution

through the implementation of mobile monitoring systems for chronic diseases

3. the patient and the next in kin

E-health solutions for chronic patients will also affect the relatives' lives

4. contact between health institutions, between the general practitioner and the specialist health care and between different health personnel Many countries have developed systems for communication between health institutions like teledermatology or teleradiology services. These services simplify the work of both the GP and the specialist, and make everyday life easier for patients.

E-health can be used in very many different aspects of health care in the future. These can range from individual surveillance of patients, monitoring chronic diseases at an affordable price, keeping medical records to international control of changes in disease patterns due to climate changes. A great many challenges will come up in areas where e-health can play a part.

Prerequisites for the development of modern and efficient e-health solutions

CPME represents European Doctors and is as such an important stakeholder in pushing the development of modern and efficient healthcare technology and solutions to improve the quality of treatments and care provided by health professionals.

It is, however, the obligation of healthcare providers, governments etc. to undertake development of e-health solutions, as they will have to cope with the challenge to o contain the rising costs of providing care and to find affordable ways to provide a reasonable level of care.

Thus, it is CPMEs task to focus on the development of guidelines, policies and recommendations pointing out, what should be taken into account upon development of such solutions.

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<sup>&</sup>lt;sup>2</sup> in its Working Document on the processing of personal data relating to health in electronic health records (EHR), 15 February 2007, WP 131



The overall aim for the development of modern and efficient e-health solutions is

- to support clinical work,
- to enhance communication with and sharing knowledge between health care professionals and patients
- to strengthen patient safety, quality development and research
- to develop simple and efficient solutions.

Today, it is completely open, whether there will be economic benefits arising from the development of e-health solutions. However, there is, obviously, the need for high investments for research and development and for the implementation of e-health applications. From a financial point of view, the costs for the development of e-health applications are very high. These high development costs will certainly have an impact on the patients, especially if the total costs of development will reach an astronomically high level.

In this context, we have to differentiate between the healthcare systems in Europe. In those health care systems where a large percentage of physicians are employed, like e.g. the UK, it is clear who will bear the costs for the implementation of e-health applications. In other systems, where doctors work in free practice the costs will have to be borne by the physicians, by the sick funds, the patients, i.e. by the health care system in its entirety. Thus, in times, where spending in health care is rather decreasing, the question remains open whether investments in new e-health applications will be worthwhile.

Therefore, new e-health solutions should only be developed if they enhance clinical results and/or allow doctors to use their time on other clinical tasks.

CPME has identified five areas concerning organisational and technical issues, which should be given special attention to, namely:

- Harvesting the potential benefits of the existing technology
- Interoperability of National EHCR Solutions
- Harmonisation of the EHCR framework
- Development of a common European Index (port) of e-health solutions.
- Establishment of a Common European on-line Medicine Index, i.e. a dynamic electronic on-line version of the patients' medication.

Harvest the potential benefits of the existing technology

Health care providers must to a larger extent utilise existing technologies to support doctors' work. CPME suggests actions taken to further employ digitalised communication and evidence based patient care, i.e. use of PDA's with updated and online evidence based standards, digitalised text- and video services (SMS/MMS), etutorials and e-learning. Every doctor should have a digital signature and all log-ons should be quick in order to save doctors valuable time, and ideally be combined with single-sign on systems.

It is not a question of developing new technologies but to use well-known technologies - also in the health care sector.

Interoperability of National EHCR Solutions

EHCR solutions should support a coherent and collaborating health care system. At all time doctors must be able to access and transmit update/live data on patients, treatments etc. Hence, it is a necessary condition that the e-health solutions are interoperable, secures protection of data and of data integrity.

European harmonisation of the EHCR framework

CPME suggests that the national authorities take actions towards further harmonisation of the EHCR framework, that is: protection of data, data integrity, legal support, access for health providers, patient access, encryption, editing and storage of data etc. The key words are compatibility and communication.

It is truly an enormous challenge on one side to make it possible to use data anywhere in the member states whenever it is necessary in connection with treatment of a patient, and on the other side to safeguard the privacy rights of the patient according to the existing rules of privacy. In this respect the recommendations of the Article 29 working party<sup>3</sup> on how to handle health data in EPR-solutions must be adhered to.

Development of a common European Index (port) of e-health solutions

All across Europe new e-health solutions are developed and improved. CPME advises that the knowledge and experiences are shared via establishment of a common European index of strategic e-health solutions containing information on the use of solutions and support of platforms.

By ensuring openness and transparency concerning information, the common benefits and possibilities of e-health are enhanced. It also increased internationalization in development of e-health solutions and consolidation of system support toward common European standards.

Establishment of a Common European on-line Medicine Index

CPME supports the development of a common European on-line Medicine Index that gives health professionals access to correct and updated medical information (prescriptions, discontinuations and dose changes) and enables cross border electronic prescription.

#### e-health solutions

Development of e-health must at all time build on the principle, that ICT supports and benefit the medical work and therefore be adjusted the needs of the health professionals. Patients and physicians must be the main beneficiaries of any type of e-health applications. Furthermore, flexibility for chronic patients should also be one of the main assets of e-health applications.

It is essential that e-health solutions are stabile, quick and safe and developed with medical professional involvement and followed by thorough training. In that matter e-health must endure usability tests under valid clinical conditions. In any case, evaluation of development, structure, and implementation of e-health applications as well as constant evaluation in the daily practice is absolutely necessary from CPME's point of view.

CPME points out the necessity of doctors close collaboration with the e-health industry. It is absolutely essential as it is doctors, who are the end-users of e-health solutions and products.

<sup>&</sup>lt;sup>3</sup> in its Working Document on the processing of personal data relating to health in electronic health records (EHR), 15 February 2007, WP 131



Due to the enormous sums and the economic entwinements between the two professional groups of physicians and the IT-industry (hard- and software producers) the contact between these two groups should be regulated in a code of conduct.

Finally, CPME underlines that

- Involvement of doctors is essential
- Testing is vital
- Education of doctors in using e-health solutions is necessary

for the development of modern and efficient e-health solutions.