

THE HEALTH POLICY GUIDANCE AND PRACTICE OF INTRODUCING TECHNOLOGIES IN HEALTH SYSTEM IN EUROPE

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ABSTRACT

Modern technology has so far been adopted into the various European health systems at different stages. This has led to a number of recommendations from the EU at a national and at an EU level [1]. In Germany, a “law on safe communication and applications in healthcare” (so called eHealth-law) has been passed by the German government in December 2015 [2]. It aims to accelerate the introduction of eHealth in Germany and includes mandatory milestones. The key aspects are an emergency health record, which must be implemented by 2018, an electronic medication plan, an electronic exchange of medical data and an EHR, which has to be implemented by the end of 2018. However, it remains arguable if such a law will be enough to facilitate the further development of eHealth.

Index Terms— Health Policy, Digital Media

1. INTRODUCTION

In Europe modern technology increasingly obtains access to the health systems. However the status of adoption is not the same in all states of the EU and there is a different understanding of what the eHealth concept includes [3]. Some aspects are for example the transmission of medical patient data within one health organization or to external institutions, tele-consultation, the usage of electronic health records for medication or in emergency cases as well as for interdisciplinary collaboration. eHealth aims to improve the communication, documentation and cooperation in health systems. In Germany the transmission of medical patient data both inside and outside the health organization is in focus [4].

2. THE HEALTH POLICY GUIDANCE AND PRACTICE OF INTRODUCING TECHNOLOGIES IN HEALTH SYSTEM IN EUROPE

In 2012 the European Commission has unveiled an eHealth Action Plan 2012-2020 to remove obstacles in the way of digital solutions in Europe's healthcare systems. The Action Plan includes the clearance of legal aspects, improving the interoperability between healthcare systems, enlightenment for citizens and health professionals and also cost-free legal advices for start-ups in eHealth sector [5].

One of the most progressive countries in Europe in terms of its IT initiatives in health system is Denmark. In 2001 the Association of County Councils in Denmark and the Ministry of Interior and Health decided to implement the The Danish eHealth Portal (“Sundhed”). In 2003 it was put in operation. Sundhed is a public portal for communication and exchange of information between citizens and health care professionals based on internet. Health professionals can get information about patients they are treating after a secure log in. Furthermore every citizen has his own electronic health record, which contains information about medication, diagnosis and treatments. In addition it is possible to book appointments, to register as organ donor, to get information about quality ratings of hospitals and to get a prescription for required drugs [6].

While Denmark is not using an electronic health card (EHC), in Germany the EHC is necessary to receive benefits from the statutory health insurance since 2015. So far the German EHC contains administrative data and a photograph of the holder [7]. Now the “law on safe communication and applications in healthcare” (e-health law) aims to implement additional health applications on the EHC. First, there is the medical emergency data set which contains relevant information about allergies, diagnosis, medication and other circumstances (eg. pregnancy). The patient is free to save his emergency data on the EHC and physicians need a smartcard to read out the information in case of emergency. The medical emergency data set is expected to be part on the EHC by 2018 and is currently being tested in pilot studies.

In addition, starting by October 2016, patients who are taking more than three different drugs have the opportunity to receive a medication plan. In 2018 it will be stored on the EHC so that physicians or pharmacists can modify data on demand.

By 2018 all hospitals and doctors' offices in Germany are expected to be connected to the new digital infrastructure in health system. This should facilitate the transmission of medical patient data between the different parties in health system. An EHR has to be implemented by the end of 2018. Citizens can inform their treating physicians about their medical patient data with the help of

the EHR. They also obtain a personal folder in which for example the blood glucose level or fitness data can be saved and optionally transmitted to their physician [8].

The electronic health card in Austria is different to Germany because it contains no medical patient data and no photo of the holder. Since 2005 it is used only for administrative activities and electronic identification [9]. With the “electronic health record law” Austria created the legal right for their EHR called ELGA in 2013. ELGA is already implemented in some areas of Austria. Discharge letters, laboratory results, radiology results and medication data are available for the health service providers like physicians, pharmacists and nursing facilities [10]. In France the implementation phase of the EHR started in 2011. The software in hospitals and doctors’ offices is conceived for easy transmission of patient data. Medical patient data which is appreciable for common medical treatment can be transferred to the EHR with touch of a button. Every physician in France also has a smartcard for the electronic communication. He can encode and electronically sign advices by using this smartcard [11].

The diverse described stages in Europe point out that no sure formula exists. But as different as the described stages of modern technology in health systems are, they all have the same requirements. First there is the technical infrastructure which is expected to connect all health professionals like hospitals, family physicians, pharmacists etc. Cross-sectoral communication structures are indispensable for health telematics. The interoperability is the second requirement. Every institution in health system must be able to use the health applications or EHR in her own system but by using existing national or international standards. At last there is the approval of the user. The orientation on the needs of the user is very important for an effective quality improvement of medical care [9].

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