INTERNET OF THINGS IN HEALTH CARE AS AN OPPORTUNITY TO ENSURE SUSTAINABLE DEVELOPMENT

Abstract:

Using science to implement new technological solutions, easily accessible and adaptable to changing needs, shapes the future. Technological progress means that the basic health care services provided thanks to the development of digital services become cheaper and available to an increasing number of recipients. Digital health which includes i.a. remote services (telemedicine) is a response to the development of civilisation. However, in order for it to be implemented according to the principles of sustainable development, apart from the processes of digitisation of health care, a normal existence of digitally excluded persons must be ensured. Therefore, the health services can not be implemented only electronically, because it could lead to discrimination of digitally excluded social groups. When implementing new services, one must at the same time make sure that parallel solutions are developed for people who can not use new technologies for objective reasons. One can not neglect development of traditional methods of treatment, because only mutual interaction and balance of traditional methods and those using new technologies allow establishing and developing a proper relationship between the patient and the doctor – the most important one, from the point of view of health protection and respect for the patients' rights.

Digital services can eliminate the need to travel to far-away healthcare centres, which reduces waiting time and makes specialised and complex services available for an increasing number of patients. However, one should ask whether such service is always synonymous with the service of direct patient contact with a doctor? A good solution seems to be the introduction of hybrid solutions that combine electronic distance contact of a patient with a specialist doctor – in the presence of a primary care doctor who, knowing the patient and his health problems, may draw the attention of the specialist to symptoms unrecognisable by the patient.

With the development of digitalisation of health care there is a need to provide emergency systems. A possible transfer of healthcare to cyberspace may cause risks which can not be ignored. Introduction of Information and Communication Technologies in many areas of life, in particular in health protection raises a number of previously unprecedented threats. It should be emphasized that complete elimination of risk is not possible, and any willingness to do so will only result in the inhibition of the implementation of modern solutions – which is neither desirable nor consistent with the assumptions of sustainable development.

Keywords:

health care, Internet of Things, sustainable development, Information and Communication Technologies, society aging, digital exclusion

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