

HTA Report | Abstract

Monitoring heart functions using telemetry

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Health-economic Background

The conditions for area-wide utilisation of telemedicine on national and European levels have to be developed. Before the nation-wide implementation in Germany can take place, the effectiveness of the structures and services of telemedicine has to be verified under everyday conditions. The utilisation of telemedicine has been assessed in recent HTA-reports that cover the existing scientific knowledge. This article also reports on the future role telemedicine could play in the telemetric monitoring of heart function.

General Background

With telemonitoring it is possible to keep body function data under continuous surveillance. This is especially useful for high-risk patients. Telemetry is the term used for the transfer of measured values from the sensor to the surveillance control point. Telemetric monitoring is well-suited for measuring cardiac function parameters without investing a lot of time and effort.

Results

Telemedicine is well accepted by the patients. It has been indicated that the implementation of telemedicine reduces both the number of hospitalisations and the duration of hospitalisation. Treatment costs are accordingly reduced. With an early diagnosis, the therapy can be optimised precociously. Considering acute medical care, a diagnosis prior to hospitalisation can lead to a reduction in the time interval between admittance and the start of therapy. Considering preventive medical care, the continuous surveillance enables a timely diagnosis. The quality of life of the patient is hereby significantly enhanced.

Conclusion

Telemetric monitoring can be applied in many areas of health care and be of positive assistance, within the single therapeutic strategies, to patients with acute and chronic cardiac illnesses. The integration of information- and communication systems available for the health sector can significantly support patient orientated medical care. This has been indicated in numerous studies/trials. Telemedicine supports the renunciation of a centralised medical care system, where the patient has to seek for consultancy, towards a patient orientated system, where expert advice (by means of care-taking networks) is transferred to the patient.

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