Abstract

TELEMED: Database on Evidence-Based Telemedicine in a Hospital Setting

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Abstract

Background: The use of telemedicine services has increased worldwide during recent years as a result of national strategies for the digitalization of health care and the COVID-19 pandemic. However, health care professionals often express uncertainty regarding the evidence and effectiveness of telemedicine interventions. Therefore, the Centre for Innovative Medical Technology at Odense University Hospital introduced the TELEMED database, an evidence-based telemedicine database.

Objective: This study aimed to ensure that hospital managers, health care professionals, and other stakeholders gain access to information about scientific studies of telemedicine interventions and their effectiveness.

Methods: The database constitutes a structured literature search in PubMed for randomized controlled trials or controlled trials on the effect of telemedicine for somatic diseases treated at hospitals. The search was conducted by staff members in the Health Technology Assessment unit at the Centre for Innovative Medical Technology. First, identified studies were sorted by screening titles and abstracts and, subsequently, by reading full-text versions. The data extracted from the studies included the setting, intervention, patient group, type of telemedicine, clinical effect, patient perception, and implementation challenges. Finally, the value of each study was assessed with respect to effectiveness.

Results: A total of 518 articles were included for data extraction and assessment. The database provides results from 22 different specialties and can be searched using the following criteria: medical specialty, country, technology, clinical effect, patient experience, and economic effect. The database serves as a platform for the dialogue with clinical departments who wish to implement telemedicine services and has a large potential for supporting the digital transformation during COVID-19 as evidence-based information on patient groups, relevant technologies, and their effect is easily accessible.

Conclusions: The TELEMED database provides an easily accessible overview of existing evidence-based telemedicine services. The database is freely available and is expected to be continuously improved and broadened over time.

Conflicts of Interest: None declared.

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KEYWORDS
telemedicine; hospital