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## ICT AND THE FUTURE OF HEALTHCARE: RESULTS OF A MULTI-SCENARIO DELPHI SURVEY

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**Background:** As far-reaching effect of the digital revolution, telehealth concepts referring to the delivery of healthcare services at a distance using Information and Communication Technology (ICT) are inevitable innovations for modern healthcare provision. Designing ICT-based solutions for medical purposes constitute an emerging field of activity for medical informatics and related scientific disciplines. Technological advances towards consumer-specific expectations require a sustained commitment and coordination across diverse policy and decision makers. The present scenario-based study aimed at identifying prevailing perceptions regarding telehealth applications among Austrian healthcare experts.

**Methods:** During a 2-round online Delphi survey, panelists rated perceived benefits, obstacles, innovativeness, desirability, and estimated implementation date of ten telehealth scenarios. These scenarios described possible outcomes of societal and IT development processes categorized into the three main topics doctor-patient communication, health promotion, and pervasive healthcare monitoring.

**Results:** Panelists (n=73, 74% males) perceived that the implementation of telehealth scenarios could especially improve patients' knowledge, quality of social healthcare, and living standard. In contrast, the three top-ranked obstacles were costs, technical prerequisites, and data security. Survey participants rated innovativeness of the presented future scenarios as quite high, whereas perceived desirability was moderate. Overall, ratings suggested precautionary attitudes towards technological innovations and remarkable inter-group differences.

**Conclusion & Significance:** It is evident that on-going technological achievements impact all levels of the complex healthcare environment. So, successful telehealth adoption presents multidimensional and inter-professional challenges, depending explicitly on human-related, social and institutional factors. The survey findings suggest building taskforces and using workshops for enhancement of communication between healthcare stakeholders to proactively shape the future of telehealth in Austria.

**Notes:**