## **Editorial Referateband 2019**

Digitization – A Challenge For Our Discipline

## $\odot$ $\odot$ $\odot$ =



Prof. Dr. med. Stefan Dazert

## Correspondence

Prof. Dr. med. Stefan Dazert Präsident der Deutschen Gesellschaft für HNO-Heilkunde Kopf- und Hals-Chirurgie e.V. 2018/2019 Univ. HNO-Klinik, St. Elisabeth-Hospital Bleichstr. 15 D-44787 Bochum

## **Bibliography**

DOI https://doi.org/10.1055/a-0740-4470 Laryngo-Rhino-Otol 2019; 98: S3–S4 © Georg Thieme Verlag KG Stuttgart - New York ISSN 0935-8943

Dear Colleagues,

it is an extraordinary pleasure for me to present this really interesting booklet that was created at the occasion of the 90<sup>th</sup> Annual Meeting of the German Society of Oto-Rhino-Laryngology, Head & Neck Surgery. The highly significant scientific contributions from nine universities discuss different aspects of the meeting's motto entitled "Digitization in Oto-Rhino-Laryngology" and show important fields for developing and securing the future of our discipline.

During the last years, digitization and *artificial intelligence* gain increasingly in importance for the German healthcare landscape and thus also for the field of oto-rhino-laryngology. With regard to future developments in healthcare services it is essential to impart digital competences to physicians, medical staff, but also to patients in a well-structured way. At the same time, the legal and ethical issues resulting from medical-technological progresses have to be thoroughly discussed.

Digitization rapidly conquers all socially relevant areas and determines decisively the global economic value development, which can be seen in the large internationally acting data companies. Hence, the digital transformation of our society is in full swing and of course, it also increasingly touches healthcare. In the international range, the German healthcare institutions rather rank behind many others with regard to digital developments so that immediate and intensive efforts have to be undertaken imperatively.

The articles presented in our booklet deal with important areas of digitization in healthcare services that are attributed a crucial role for the future development of oto-rhino-laryngology.

The basics of electronically medical data management will be elucidated that have already been implemented in different healthcare areas. Particular attention is paid to the electronic patient record with reference to a higher healthcare quality with lower treatment costs. The development of registries focuses on the evaluation of the effectiveness of treatment routine, monitoring of the patient safety as well as the economic evaluation and research on minimum quantities. Furthermore, registries pursue the objective to describe epidemiologic correlations and differences and to support quality management and improvement as well as clinical research.

In the context of mobile information and communication technology for medical services, the topic of quality is also in the focus of implementing search engines and apps. So the role of the internet for the continuously growing availability of health information is discussed and important hints to the quality of available data are given to the users. Another contribution presents different options for users of medical apps on how to assess and beneficially use those apps based on defined quality criteria in different categories such as for example functionality, scientific character, but also data protection and privacy.

An example of direct application for digitally supported patient treatment in hospitals, the implementation of a "digital (ENT-specific) OR of the future" may be considered. It is not only the question of providing merely technical improvements of single computer-assisted devices and instruments, but moreover of establishing their dynamic networking and system integration in an open modular system aiming at improving the quality and patient safety.

Similar objectives with regard to the treatment quality are observed in the digital developments of telemedicine in our discipline as well as modern concepts of hearing rehabilitation where the implementation of *artificial intelligence* and *remote care* open new strategic options. Today, molecular genetic diagnostics of hearing disorders in the context of diseases are mainly oriented at the rapidly developing field of genomics that is based on technological developments of sequencing, computer and bio-informatics. In this context, the term of *big data* plays a crucial role and encompasses the application of large data volumes that are available in form of genetic databases, *in silico* analysis tools, and allele frequency databases.

The development of digital strategies in learning and teaching is possible due to the technological progresses of the last decades, but also mainly on the motivation to focus didactic concepts increasingly on the learning individuals. The degree of digitization of learning and teaching reaches from digital service provision over punctual digital availability of classic learning concepts up to completely digital studies. Here, aspects that are relevant for oto-rhino-laryngology are presented, which take the current needs of the students into particular consideration.

I hope that we all read the articles with high interest and hopefully find many ideas and stimuli for our future everyday work in hospitals and practices. With a cordial "Glück auf!", which is a well-known miners' greeting in Germany, and best wishes for the upcoming meeting,

·d.

Stefan Dazert