

Digital transformation begins with information capture

Dragon Medical Direct speech recognition with i.s.h.med from Cerner

Comprehensive rollout without stumbling blocks

Charité Universitätsmedizin Berlin has been using speech recognition in all its locations in Berlin since 2018. There are now 1,200 users in the system using Dragon Medical from Nuance, provided on thin clients from VMware. In addition to medical professionals, speech recognition is also used by administrative colleagues and other departments, since the solution is available as a stand-alone application for every system—both for the hospital information system i.s.h.med and for emails or word processing.

The fact that the number of users has surpassed a thousand within a year is mainly due to the excellent recognition rate. Dragon Medical features a deep medical vocabulary and an extensive general recognition vocabulary.

The IT department of Charité Universitätsmedizin Berlin concludes that the rollout and the acceptance of speech recognition is a project with maximum positive results.

“This project was a proposal to the medical professionals at Charité which did not require any persuasion as it was speaking to a great demand.”

– Martin Peuker – CIO,
Head Business Division IT, Charité

The future: mobile and intelligent

Mobility is a decisive and trendsetting factor for the overall digitisation of Charité. It is a guarantor of the future that permeates all processes of patient care.



Charité – Universitätsmedizin Berlin:

- 4 campuses in Berlin
- 3,001 hospital beds
- 152,693 inpatients
- 692,920 outpatient cases
- 5,442 births
- 4,255 scientists & clinicians

Accordingly, our departments have a large mobile sector with currently over 800 iPads in use—a tendency that is increasing. A first pilot project with speech-based data acquisition on tablets delivered very good recognition results despite the background noise often being much more pronounced during documentation than when working at a terminal. Speech recognition is also available via the Charité VPN on business trips or at home—including personal recognition vocabularies and voice profiles.

The Charité is thus creating a visionary speech infrastructure—stationary, mobile and remote.

Experience digitisation:

“Every minute gained is well worth it.”

The Mannheim University Hospital acquired speech recognition software for the HIS i.s.h.med via the Nuance partner Cerner. With 560 licences for Dragon Medical Direct currently in use, clinicians at the university hospital spend less time on administrative tasks. Time that ultimately benefits patients.

“The increase in efficiency through speech recognition generates many minutes over the day. Every minute that can be spent with the patients, answering their questions is well worth it,” says Benjamin Hoch, specialist in gynaecology and obstetrics, Mannheim University Hospital.

Why the University Hospital chose Dragon Medical Direct: :



- **Server based:** Independent of existing hardware and IT infrastructure, Dragon Medical Direct works in a Citrix environment with IGEL terminals in the HIS i.s.h.med from Cerner.



- **Training:** The software is ready for use—without further training of the voice profiles, application training to ensure optimal use and user satisfaction is essential.



- **Recognition rate:** The initial recognition rate is very good and improving continuously.



- **Information security:** A full local installation that is GDPR compliant, so that the data does not leave the establishment.



- **Compatibility:** Can be used with any software application, e.g. SAP, Word, Outlook.



- **Intercultural competence:** Users with accents achieve recognition rates just as good as German native speakers.



- **Scalability:** Speech recognition is provided via the central server for all 560 users.



- **Roaming:** Profile roaming allows clinicians to access their speech-recognition system from any workstation.



- **Simplicity:** Implementation, roll-out, maintenance and use are easy



- Rhine-Neckar Metropolitan Region with 2.4 million inhabitants
- Inpatients: 51,773
- Outpatients: 217,120
- Average stay of 6.7 days
- Emergencies: 67,791 per year
- Births: 2,032
- Clinicians: approx. 560

Quality improvements in clinical reports and discharge summaries

„Thanks to speech recognition, text modules are now more frequently replaced by free text. I see this as a gain because patients are dealt with individually.

Additionally, speech recognition can accompany me everywhere and at all times: on the ward, at night or in the emergency department.“

- Benjamin Hoch, specialist in gynaecology and obstetrics, Mannheim University Hospital