

## CASE STUDY

### First-class quality for patients

Lucerne Cantonal Hospital has seen a substantial increase in productivity as a result of speech recognition

With Voicepoint's dictation management and speech recognition solution, Lucerne Cantonal Hospital is setting new standards in the field of medical documentation. We pay a visit to Switzerland's biggest center-hospital.

With four different sites all offering a high level of medical expertise, Lucerne Cantonal Hospital (LUKS) takes care of patients as near to their homes as possible and close to their family and friends. LUKS' specialists are organised in centres and specialised clinics spanning a variety of disciplines. This collaboration enables patients with complex diseases, multiple illnesses and serious injuries to receive optimal treatment. Given the high number of patients that LUKS looks after, specialists have a great deal of experience in their disciplines. Being an academic teaching hospital, specialists work at the cutting edge of science, always with the aim of ensuring the highest quality for patients in Central Switzerland.

#### Significantly improved workflows

Medical and administrative documentation plays a very important role at all hospitals, however can be very time-consuming. Technologies are required to map documentation processes more efficiently. To address this issue, Lucerne Cantonal Hospital assessed a new digital dictation solution for all of its sites. The existing different systems needed to be replaced by one uniform product. As part of a public tender procedure, LUKS opted for Voicepoint's Winscribe solution.

## Facts

### Client

Lucerne Cantonal Hospital  
[www.luks.ch](http://www.luks.ch)

### Objective

To make generating reports a more flexible and faster process, to improve workflows and gain more time for patients

### Solution

Winscribe Dictation Software  
Voicepoint Device Administrator  
Voicepoint User Loader  
Voicepoint Configuration Manager  
Voicepoint Firebox  
Dragon Medical with specialist vocabularies  
Philips Digital Pocket Memo 8500 with Barcode Scanner  
Philips SpeechMike 3500/3510

“Thanks to speech recognition, both the quantity and quality of my reports has increased. The level of accuracy was very high from the outset.”

**Dr. med. Timothy Collen,**  
Co-Head Physician, Radio-Oncology

The dictation management system also needed to include speech recognition in order to further reduce the turn-around time of reports. The implementation of Winscribe was completed in summer 2016. The system is currently used by around 1,000 doctors and 450 secretarial staff. In addition to this, several departments have also introduced Dragon Medical speech recognition software that can be integrated in Winscribe.

Apple iPods are used for recording, as well as Philips mobile and stationary dictation recorders. To ensure dictations are assigned to a case, doctors scan the relevant barcode using a dictation recorder or iPod. The solution was flexibly adapted to existing processes according to departments, whilst at the same time optimising several hospital information system workflows. In collaboration with Voicepoint, LUKS has also adjusted the types of reports in order to reduce administration which was made possible thanks to close coordination between doctors and medical offices. The Reporting module and workflow functions included in Winscribe ensure that unequal workloads are detected early on. To further improve processes, Winscribe was integrated into the existing hospital information system. For Alexander Spuhler, Winscribe Application Manager at LUKS, this is a clear advantage: “Integration into the hospital information system simplifies work and saves time over manually searching for patients. In the radiology department, we have integrated speech recognition into the IT system and in the near future, integration into the lab information system will follow in pathology».

### Centralised and automated management

A central Winscribe infrastructure was developed for LUKS' different sites. One of the most important requirements was to centrally manage all software and hardware components together with master data of users. This was made possible by configuration modules Voicepoint Device Administrator and Voicepoint User Loader. Alexander Spuhler gives us an insight into the new system management: “Thanks to the web-based Voicepoint Device Administrator, recorders no longer have to be configured by users on site.

It is also much easier to manage an employee's change of department”. Voicepoint User Loader makes user administration easier, since master data is automatically created when an employee joins and assigned to the correct departments. Thus, the two modules make IT work easier: “The days of creating a user manually and of configuring a recorder on site are over”, Alexander Spuhler concludes.

### Reports available faster

In addition to digital dictation with Winscribe, several departments are already using Dragon Medical Speech Recognition. This software enables doctors at LUKS to finish reports outside normal office hours, when secretarial staff are no longer present. Thanks to the Voicepoint Firebox software module, users can login to speech recognition from any computer and with their own personal username and access their personal settings. Specialised vocabularies, a high level of accuracy and freely configurable text blocks all help to ensure that reports can be generated faster and more efficiently by doctors themselves, as Alexander Spuhler states: “Speech recognition shortens the amount of time needed for administrative tasks considerably and leaves more time for patient-related tasks. We estimate the increase in productivity when generating reports to be around 60 percent”. Dr. med. Timothy Collen, Co-Head Physician at the Institute of Radio-Oncology, is significantly faster at generating reports than previously when typing: “Thanks to speech recognition, both the quantity and quality of my reports have increased. The level of accuracy was very high from the outset”. Given its good experiences with speech recognition, LUKS is now planning to roll it out to other clinics: “Speech recognition is more popular than ever. Following the massive increase in efficiency when using Dragon Medical, demand from the various different clinics has increased considerably”, says Manuel Brunner, Team Manager Third-Party Products at LUKS.

